Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Comparing The effectiveness of circadian rhythm and menstrual period on the recovery of a session of exhausting activity in inactive young women.

Protocol summary

Study aim
Comparing the effectiveness of circadian rhythm and menstrual period on the recovery of a session of exhausting activity in inactive young women

Design
Clinical trial with one group, experimental group in follicular phase and luteal phase conditions in a crossover manner in the morning and evening

Settings and conduct
The exercise testing protocol will be as follows: First warm up - adopt a standard warm up protocol: 5 minutes of cycling at 50-60 rpm with load = 2% of body weight, rest before the Wingate test. A shorter warm up (5-10 minutes) at submaximal effort is sufficient for experienced athletes and then perform the Wingate protocol - maintain the seat height and ergometer calibration throughout the sessions. The resistance load should be 0.075 kg/kg body weight for women. Provide strong verbal encouragement.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Age range 18 to 23 years No regular exercise in the past six months Regular menstrual cycle (28 ± 7 days) Signed informed consent Exclusion criteria: Use of hormonal contraceptives Severe premenstrual syndrome (PMS) Musculoskeletal injury Non-cooperation in the test stages

Intervention groups
The experimental group performs the Wingate test in a cross-sectional manner in two time periods: morning and evening during the follicular phase and luteal phase.

Main outcome variables
Wingate peak power, average power, fatigue index

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20260417069089N5**
Registration date: **2026-07-26, 1405/05/04**
Registration timing: **registered_while_recruiting**

Last update: **2026-07-26, 1405/05/04**
Update count: **0**

Registration date
2026-07-26, 1405/05/04

Registrant information

Name
Saber Saedmocheshi

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 918 999 5148

Email address
metabolism1393@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-07-23, 1405/05/01

Expected recruitment end date
2026-09-23, 1405/07/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparing The effectiveness of circadian rhythm and menstrual period on the recovery of a session of

exhausting activity in inactive young women.

Public title
Comparing The effectiveness of circadian rhythm and menstrual period on the recovery of a session of exhausting activity in inactive young women.
Purpose
Health service research
Inclusion/Exclusion criteria
Inclusion criteria:
Regular menstruation Athletic
Exclusion criteria:
Brushing your teeth Eating any food two hours before exercise
Age
From **18 years** old to **23 years** old
Gender
Female

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **22**
Randomization (investigator's opinion)
N/A
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
University of Kurdistan
Street address
University of Kurdistan, Daneshgah Street, Pasdaran Blvd., Sanandaj
City
Sanandaj
Province
Kurdistan
Postal code
6617115177
Approval date
2026-06-01, 1405/03/11
Ethics committee reference number
IR.UOK.REC.1405.030

Health conditions studied

1

Description of health condition studied
Healthy people in the follicular phase and luteal phase
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Peak power
Timepoint
Immediately after the Wingate test
Method of measurement
Wingate Bicycle

2

Description
Fatigue index
Timepoint
Immediately after the Wingate test
Method of measurement
Wingate Bicycle

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Subjects will perform the Wingate exercise test protocol in a cross-over manner in the morning and afternoon in the luteal and follicular conditions. This will be as follows: First warm-up - adopt a standard warm-up protocol: 5 minutes of cycling at 50-60 rpm with load = 2% of body weight, rest before the Wingate test. A shorter warm-up (5-10 minutes) with submaximal effort is sufficient for experienced athletes and then perform the Wingate protocol - maintain the seat height and ergometer calibration throughout the sessions. The resistance load should be 0.075 kg/kg body weight for women. Provide strong verbal encouragement.
Category
Lifestyle

Recruitment centers

1

Recruitment center
Name of recruitment center
University of Kurdistan
Full name of responsible person

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Full name of responsible person
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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
University of Kurdisan
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
University of Kurdistan
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Saber Saedmocheshi
Position
Faculty member
Latest degree
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Other areas of specialty/work
Sport Medicine
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Physiology
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Person responsible for updating data

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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
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
All data is potentially shareable after de-identifying individuals.
When the data will become available and for how long
One year after publish
To whom data/document is available
All people who study women and menstruation in academic institutions, as well as women
Under which criteria data/document could be used
The information extracted from the present work can be used by sports coaches who are designing training programs, women, and obstetricians to improve their performance.
From where data/document is obtainable
After publishing the data in reputable journals, the reader, after studying and being interested in the topic in question, is first referred to the author responsible for the work whose email address and phone number are mentioned in the article. In the second stage, the other authors of the article are contacted using your email. In the third stage, they can go to the place where the research was conducted, i.e. the university, and obtain information from the university's research department.
What processes are involved for a request to access data/document
After the publication of the article, which takes one year, readers who are interested in this field can immediately message or email the responsible author after one year and when the article is published. The responsible author will provide the person with relevant data and appropriate information as soon as possible and on the same day.
Comments