Clinical Trial Protocol
Iranian Registry of Clinical Trials

23 Sep 2026

Effects of One Session Moderate-Intensity Aerobic Training and High-Intensity Interval Training on Food Craving- Food Choices- and Some Psychological Factors Related to Appetite Control in Overweight and Obese Women

Protocol summary

Study aim
Determining the effects of a session of moderate-intensity aerobic exercise and high-intensity interval training on craving, food choice, appetite, impulsivity, risk-taking decision-making, cognitive flexibility, and perceptual responses in overweight and obese women with cravings food

Design
Clinical trial, with control conditions, crossover, 15 participants, randomization will be done through Irandomization.com.

Settings and conduct
The present research will be conducted in the Faculty of Sports Sciences of Razi University of Kermanshah. Each participant will be exposed to three conditions of aerobic exercise, interval training or control condition in a random order.

Participants/Inclusion and exclusion criteria
Criteria for entering the research: age range from 18 to 40 years old, resident of Kermanshah city, body mass index (BMI) between 25 and 35 kg/m2, with food cravings (getting a total score of 108 or higher from the 15-item food craving questionnaire and 12-item visual analog questionnaire of craving for food), obtaining a certificate of non-prohibition of participation in the exercise program from the doctor - criteria for not entering the research: smoking, alcohol and various types of drugs, the presence of musculoskeletal abnormalities or disorders, participation in weight loss programs In the last 6 months, participating in a regular exercise program in the last 6 months

Intervention groups
A session of moderate intensity aerobic training, a session of high intensity interval training, a session of watching a 30-minute documentary film.

Main outcome variables
Food craving, food choice, appetite, impulsivity, risk-taking decision, cognitive flexibility, perceptual responses.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20241020063435N1**
Registration date: **2024-10-26, 1403/08/05**
Registration timing: **registered_while_recruiting**

Last update: **2024-10-26, 1403/08/05**
Update count: **0**

Registration date
2024-10-26, 1403/08/05

Registrant information

Name
Chnour Ghaderi

Name of organization / entity
The Razi University of Kermanshah

Country
Iran (Islamic Republic of)

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+98 87 3459 0085

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chnourghaderi77@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-10-26, 1403/08/05

Expected recruitment end date

2024-11-08, 1403/08/18

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of One Session Moderate-Intensity Aerobic Training and High-Intensity Interval Training on Food Craving- Food Choices- and Some Psychological Factors Related to Appetite Control in Overweight and Obese Women

Public title

Effects of a Session of Aerobic exercise with moderate-Intensity and intermittent exercise with high intensity on craving and appetite control in overweight and obese women

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Age range from 18 to 40 years A resident of Kermanshah Body mass index (BMI) between 25 and 35 kg/m2 Having food cravings (getting a total score of 108 or higher from the 15-item food craving questionnaire and the 12-item visual analog food craving questionnaire) Obtaining a certificate of non-prohibition of participation in sports training program from the doctor

Exclusion criteria:

Smoking, alcohol and drugs Abnormalities or musculoskeletal disorders Participation in weight loss programs in the last 6 months Participating in a regular exercise program in the past 6 months

Age

From **18 years** old to **40 years** old

Gender

Female

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **15**

Randomization (investigator's opinion)

Randomized

Randomization description

In this study, the order of subject exposure to 3 different conditions (moderate intensity aerobic exercise, high intensity intermittent exercise and control condition) will be randomized by Latin square method. For this purpose, first, using the website www.random.org, each subject will be randomly assigned a number between 1 and 15 as an identification code. Then, the English letters A.B.C will be assigned to the three intervention conditions and a Latin square with three rows and three columns will be created. Finally, participants number 1 to 5 are placed in the sequence of the first row, participants number 6 to 10 are placed in the sequence of the second row, and participants number 11 to 15 are placed in the sequence of the third row.

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

Research Ethics Committee of Razi University

Street address

Taq Bostan, University Street, Razi University, Faculty of Sports Sciences

City

Kermanshah

Province

Kermanshah

Postal code

6714414971

Approval date

2024-07-03, 1403/04/13

Ethics committee reference number

IR.RAZI.REC.1403.017

Health conditions studied

1

Description of health condition studied

overweight and obesity

ICD-10 code

E66

ICD-10 code description

Overweight and obesity

Primary outcomes

1

Description

Food cravings

Timepoint

24 and 48 hours after completing the interventions

Method of measurement

15-item food craving questionnaire and 12-item visual analogue food craving questionnaire

2

Description

Food preference

Timepoint
Before and after the interventions
Method of measurement
Online food preference questionnaire software

3

Description
appetite
Timepoint
1, 2, 4, 24 and 48 hours after the intervention
Method of measurement
Visual analogue subjective scale of appetite

Secondary outcomes

1

Description
impulsiveness
Timepoint
Before and after the interventions
Method of measurement
Go/no go cognitive test software

2

Description
Risky decision making
Timepoint
Before and after the interventions
Method of measurement
Iowa gambling cognitive test software

3

Description
Cognitive flexibility
Timepoint
Before and after the interventions
Method of measurement
20-question cognitive flexibility questionnaire

4

Description
sense of pleasure
Timepoint
Before and after the interventions
Method of measurement
11-item emotion scale

5

Description
Arousal level
Timepoint
Before and after the interventions
Method of measurement
6-point scale of perceived arousal

Intervention groups

1

Description
Intervention group: In this research, all the subjects will be exposed to two intervention conditions with an interval of at least 7 days, including 1- aerobic exercise with moderate intensity, 2- intermittent exercise with high intensity.
Category
Treatment - Devices

2

Description
Control group: In this study, all the subjects will watch a documentary film for 30 minutes that does not have any spiritual, psychological, emotional or motivational effects.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Razi University of Kermanshah
Full name of responsible person
Amir Abbas Monazzami
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Taq Bostan, University Blvd., Razi University, Faculty of Sports Sciences
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Razi University of Kermanshah
Full name of responsible person
Dr. Mostafa Mostafaei
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Taq Bostan, University Street, Razi University
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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
Razi University of Kermanshah

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
Razi University of Kermanshah

Full name of responsible person
Amir Abbas Monazzami

Position
Associate Professor

Latest degree
Ph.D.

Other areas of specialty/work
Sport Medicine

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Taq Bostan, University Street, Razi University, Faculty of Sports Sciences

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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
Undecided - It is not yet known if there will be 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 can be shared after de-identifying subjects.

When the data will become available and for how long

6-9 months after printing the results

To whom data/document is available

Supervisor and executive researcher

Under which criteria data/document could be used

Meta-analysis research

From where data/document is obtainable

Take action by sending an e-mail to Amirabbas Monazzami, supervisor, at monazzami.amirabbas@gmail.com and Chnour Ghaderi, researcher, at chnourghaderi77@gmail.com.

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

In case of an official request, the relevant reasons are announced and full details are mentioned, the data will be sent via email after 72 hours.

Comments