

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### Comparison of the effect of Piperine and Capsaicin on Nitric Oxide and Creatine Kinase after 8 weeks Tabata bodybuilding exercise

#### Protocol summary

##### Study aim

Comparison of Kreatine Kinase enzyme changes in response to taking Piperine and Capsaicin after 8 weeks Tabata

##### Design

Clinical trial with control group /Using a random number table and randomized, samples will set in groups. The sample size will be 10 people in each group.

##### Settings and conduct

The venue will be the club of Tan Ara in Gharchak. Blood sampling is done from both intervention and control groups. Then they will set in their groups: Peprin and Tabata groups, Capsaicin and Tabata groups and Ccontrol group. Then they will receive supplement and perform Tabata. At the end of 8 weeks of training and supplements, blood sampling will be done again. Blood samples are transmitted to the reference laboratory for the study of changes in Creatine Kinase and Nitric Oxide.

##### Participants/Inclusion and exclusion criteria

Entry requirements: Enough physical fitness/ Appropriate age/male Taekwondo athletes Conditions of non-arrival: Cigarette smoking/Supplement using/ Any kind of acute or chronic illness

##### Intervention groups

3 intervention groups: 1. Peprin and Tabata training , 2. Cepsiecin and Tabata, 3. Control Group

##### Main outcome variables

Changes of Nitric oxide ,Changes of Creatine Kinase

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20171210037809N3**

Registration date: **2019-07-27, 1398/05/05**

Registration timing: **registered\_while\_recruiting**

Last update: **2019-07-27, 1398/05/05**

Update count: **0**

##### Registration date

2019-07-27, 1398/05/05

##### Registrant information

###### Name

farah nameni

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 8843 6932

###### Email address

f.nameni@yahoo.co.uk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-06-26, 1398/04/05

##### Expected recruitment end date

2019-08-27, 1398/06/05

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the effect of Piperine and Capsaicin on Nitric Oxide and Creatine Kinase after 8 weeks Tabata bodybuilding exercise

##### Public title

Effect of TABATA and Piperine and Capsaicin on Nitric Oxide and Creatine Kinase

##### Purpose

Other

##### Inclusion/Exclusion criteria

**Inclusion criteria:**

Lack of complementary supplementation use during the past six months Having physical fitness preparation required No history of any cardiovascular disease Having the necessary age requirement( 20-25 years)

**Exclusion criteria:**

Cigarette smoking Using particular medication (insulin, aminophylline, fursomide ....)

**Age**

From **20 years** old to **25 years** old

**Gender**

Male

**Phase**

3

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **30**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Names of male volunteer athletes of stadiums of Gharchak city who interested to cooperation was recorded(200-250)/then they will complete the questionnaire of entry standard/ 30 persons will be selected/ then they will be numbered and their names will be written on sheets and will be spilled in a bowl.One sheet will be selected in tern and the names will be in one of the groups(3 groups of 10 people)

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

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

Ethics Committee of the Faculty of Medical Sciences, Islamic Azad University of Varamin Branch

**Street address**

Naghshe-Jahan Bulvar/University of Square/ IAU Varamin- Pishva -Branch/ Pishva/ Varamin/ IRAN IAU

**City**

Tehran

**Province**

Tehran

**Postal code**

1637876791

**Approval date**

2018-11-06, 1397/08/15

**Ethics committee reference number****Health conditions studied****1****Description of health condition studied**

In this study, the effect of Tabata's training and consumption Capsaicin with Tabata's training and consumption of Peperin Will be compared.

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

Changes in Kreatine Kinase / Nitric Oxide enzymes

**Timepoint**

At the beginning of the study, after the start of the supplement and 8-week training period

**Method of measurement**

Use of special kits

**Secondary outcomes****1****Description**

Changes in Creatine Kinase

**Timepoint**

The beginning of the study (before the intervention) and 8 weeks after completion of the supplementation and practice

**Method of measurement**

Kit :unit/ on international unit

**2****Description**

Nitric Oxide

**Timepoint**

The beginning of the study (before the intervention) and 8 weeks after

**Method of measurement**

Nitric Oxide assay kit

**Intervention groups****1****Description**

Intervention group 1: Capsaicin is a food supplement that contains 500 mg capsules,that is used by America's Food NOW , Cayenne brand.That ,with a glass of water is taken, three times a day after eating, for 8 weeks.

**Category**

N/A

## 2

### Description

Intervention group2 : Peprin Herbal and Edible Peppergin Capsules in Numeric Packages will be ,made in pharmaceutical company Kimia Farawar Booali Iran.Each capsule contains will be 2.55 mg Piperine and 1.38 mg Gingerols.The formulation of this product are from the extracts of Black Pepper, Long Pepper and Ginger.After a meal, a capsule ,twice and every time is taken .

### Category

N/A

## 3

### Description

Control group : No supplement /only Tabata exercise

### Category

N/A

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

All of sports halls in Gharchak

##### Full name of responsible person

Shahrzad sadat Abas-Abadi

##### Street address

Naghshe- Jahan Bulvar, University of Square / IAU  
Varamin/ Pishva.Pishva-Varamin-IRAN

##### City

Varamin

##### Province

Tehran

##### Postal code

33817-74895

##### Phone

+98 21 3672 5011

##### Fax

+98 21 3672 4767

##### Email

dastavard96@gmail.com

##### Web page address

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Islamic Azad University

##### Full name of responsible person

Sharzad sadat Abas Abadi

##### Street address

IAU square. Naghshe- Jahan shahrak .Pishva .  
Varamin

##### City

Varamin

##### Province

Tehran

##### Postal code

33817-74895

##### Phone

+98 21 3672 5011

##### Fax

+98 21 3672 4767

##### Email

dastavard96@gmail.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

Other

## Person responsible for general inquiries

#### Contact

##### Name of organization / entity

Islamic Azad University

##### Full name of responsible person

Shahrzad sadat Abas-Abadi

##### Position

Teacher / Coach

##### Latest degree

Master

##### Other areas of specialty/work

Physiology

##### Street address

IAU square. Naghshe- Jahan shahrak .Pishva .  
Varamin

##### City

Varamin

##### Province

Tehran

##### Postal code

33817-74895

##### Phone

+98 21 3672 5013

##### Email

dastavard96@gmail.com

## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

Islamic Azad University

##### Full name of responsible person

Sharzad Abas-Abadi

**Position**

Teacher/ Coach

**Latest degree**

Master

**Other areas of specialty/work**

Physiology

**Street address**

IAU square. Naghshe- Jahan shahrak .Pishva .  
Varamin

**City**

Varamin

**Province**

Tehran

**Postal code**

1637876791

**Phone**

+98 21 3672 5014

**Email**

dastavard96@gmail.com

**Person responsible for updating data****Contact****Name of organization / entity**

Islamic Azad University

**Full name of responsible person**

Farah Nameni

**Position**

Assistant Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiology

**Street address**

IAU square. Naghshe- Jahan shahrak .Pishva .  
Varamin

**City**

Varamin

**Province**

Tehran

**Postal code**

1637876791

**Phone**

+98 21 3672 5014

**Email**

f.nameni@yahoo.co.uk

**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**

No more information

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available