

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jul 2026

Effect of different beverages consumption on Recovery time, Performance, Oxidative stress, Inflammatory biomarkers and Muscle damage indices after RAST test in Taekwondo Players

Protocol summary

Summary

This study is designed to evaluate the effects of different beverage consumption on exercise performance, lipids Profile, inflammatory biomarkers in male Taekwondo players in Isfahan. We will conduct a repeated measures crossover design involving twenty two apparently healthy, well-trained male Taekwondo athletes (aged 20-30 yr) who exercised at least three times a week for 3 years. Participants will consume either 250cc of Dough, non alcoholic beer or carbohydrate dink (placebo) immediately and 250 cc after one hour posterior R.A.S.T protocol, in separated trials. This study consisted of one session with the first drink and the first four-day washout, the second intervention session with a two drink and the three intervention session with a placebo. Participants will be asked to food recall for the 1 day before intervention. Exercise performance, biochemical measures including fasting plasma glucose, triglyceride, total-cholesterol, high density lipoprotein cholesterol (HDL-c), and low density lipoprotein cholesterol (LDL-c), C-reactive protein (CRP), muscle soreness, inflammation and oxidative stress, lactate blood, f2 isoprostane, maximum oxygen consumption (Vo2max) indexes will be measured at the beginning and end of the study and will be compared among dough, non alcoholic beer and placebo groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012121611763N1**

Registration date: **2013-01-06, 1391/10/17**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-01-06, 1391/10/17

Registrant information

Name

Gholamreza Askari

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 31 1792 2110

Email address

askari@mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Isfahan University of Medical Sciences

Expected recruitment start date

2012-12-19, 1391/09/29

Expected recruitment end date

2013-02-13, 1391/11/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of different beverages consumption on Recovery time, Performance, Oxidative stress, Inflammatory biomarkers and Muscle damage indices after RAST test in Taekwondo Players

Public title

The effect of variety drink on performance

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria: Exercise at least 3 years experience; not use supplementation; willingness to participate in study; non smokers and drug non consumers; ages 20 to 30 years; Lack of specific diseases. Exclusion criteria: Participants tend to leave the study at any stage of the study; use supplementation and smoking.

Age

From **20 years** old to **30 years** old

Gender

Male

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

Used

Assignment

Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Isfahan Regional Bioethics Committee

Street address

Isfahan University of Medical Sciences, Hezarjarib St.,
Isfahan

City

Isfahan

Postal code

81745319

Approval date

2012-10-24, 1391/08/03

Ethics committee reference number

391297

Health conditions studied

1

Description of health condition studied

Sports Nutrition

ICD-10 code

Z00.8

ICD-10 code description

Other general examinations

Primary outcomes

1

Description

Maximal Oxygen Consumption

Timepoint

before and after intervention

Method of measurement

ml/kg.min, Harvard Step Test

2

Description

C- reactive protein

Timepoint

before and after intervention

Method of measurement

Enzyme-Linked Immunosorbent Assay (ELISA),,ng/mL

3

Description

Blood lactate

Timepoint

before and after intervention

Method of measurement

Lactometer,mg/dl

4

Description

Lactate Dehydrogenase

Timepoint

before and after intervention

Method of measurement

mg/dL, Colorimetric

5

Description

F2 looprostane

Timepoint

before and after intervention

Method of measurement

Enzyme-Linked Immunosorbent Assay (ELISA),μU/mL

Secondary outcomes

1

Description

Serum Low-Density Lipoprotein cholesterol (LDL-c) Levels

Timepoint

Before and after intervention

Method of measurement

Enzymatic, mg/dL

2

Description

Serum High-Density Lipoprotein cholesterol (HDL-c) Levels

Timepoint

Before and after intervention

Method of measurement

Photometrics, mg/dL

3

Description

Serum Total Cholesterol Levels

Timepoint

Before and after intervention

Method of measurement

Photometrics, mg/dL

4

Description

Serum Triglyceride Levels

Timepoint

Before and after intervention

Method of measurement

Photometrics, mg/dL

5

Description

Blood Sugar

Timepoint

Before and after intervention

Method of measurement

mg/dL, Colorimetric

Intervention groups

1

Description

The Dough group receives 250 cc of Dough immediately and one hour after RAST test

Category

Other

2

Description

The Non Alcoholic Beer group receives 250 cc of Non Alcoholic Beer immediately and 250 cc one hour after RAST test

Category

Other

3

Description

The Carbohydrate drink group receives 250 cc of Carbohydrate drink immediately and 250 cc one hour after RAST test

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Board of Sports Medicine Isfahan

Full name of responsible person

Gholamreza Askari

Street address

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Deputy of Isfahan University of Medical Sciences

Full name of responsible person

Doctor Peyman Adibi

Street address

Isfahan University of Medical Sciences, Hezarjarib St., Isfahan

City

Isfahan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Research Deputy of Isfahan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Isfahan University of Medical Sciences

Full name of responsible person

Afshin Shiranian

Position

MSc of Nutrition

Other areas of specialty/work

Street address

School of Nutrition and Food sciences, Isfahan

University of Medical Sciences, Hezarjarib St., Isfahan

City

Isfahan

Postal code

Phone

+98 31 1792 2658

Fax

Email

afshin_shr@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Isfahan University of Medical Sciences

Full name of responsible person

Gholamreza Askari

Position

Ph.D. in Nutritional Sciences

Other areas of specialty/work

Street address

School of Nutrition and Food sciences, Isfahan
University of Medical Sciences, Hezarjarib St., Isfahan

City

Isfahan

Postal code

Phone

+98 31 1792 2658

Fax

Email

askari@mui.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Isfahan University of Medical Sciences

Full name of responsible person

Afshin Shiranian

Position

MSc of Nutrition

Other areas of specialty/work

Street address

School of Nutrition and Food sciences, Isfahan
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Phone

+98 31 1792 2658

Fax

Email

afshin_shr@yahoo.com

Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty