Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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 alchoholic 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 alchoholic 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 immeadtaly and one hour after RAST test
Category
Other

2

Description
The Non Alchoholic Beer group receives 250 cc of Non Alchoholic Beer immeadtaly and250 cc one hour after RAST test
Category
Other

3

Description
The Carbohydrate drink group receives 250 cc of Carbohydrate drink immeadtaly 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
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

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