Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Assessing the Simultaneous effect of dill (Anethum Graveolens) extract supplementation with regular aerobic exercise on cardiovascular risk factors in hyperlipidemic patients

Protocol summary

Summary

Objectives: The overall aim of this project is investigate the simultaneous effect of dill (Anethum Graveolens) extract supplementation with regular aerobic exercise on cardiovascular risk factors in hyperlipidemic patients and Comparison with the effect of activity and effect of dill extract alone. Design: 60 subjects of the participants will be divided completely randomized into four groups: control group, regular aerobic exercise group, dill extract group and regular aerobic exercise combined with dill extract group. Setting and conduct: Regular aerobic exercise group attend in training 3 sessions per week for 45 minutes are placed on treadmill with 60 to %70 of maximum heart rate reserve(10 minute warm up, 30-minute main activity and 5-minute cool down). Also dill extract group (Dillsun drops, made by barijessance company of iran) is used with a daily dose 2/mg/ kg/ day, that this amount will be consumed in three servings. Regular aerobic exercise combined with dill extract group will performed simultaneously the above mentioned both protocols and the control group did not run the protocol and will continue its normal routine. After 8 weeks of the protocol are examined in terms of cardiovascular risk factors. Inclusion criteria: patients with cholesterol and triglyceride 200 to 300 mg/dl; ages ranged between 20 to 50 years; lack of use non prescription drugs; Lack of regular activity. Exclusion criteria: having systemic problems; including acute cardiovascularand lung disease; Smoking and Consumption of alcoholic beverages. main outcome measures: Colestrol, Triglyceride, low and high density lipoprotein, c reactive protein and malondialdehyde.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014100419397N1**
Registration date: **2014-11-10, 1393/08/19**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-11-10, 1393/08/19

Registrant information

Name

Bahram Jamali Qarakhanlou

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 41 3336 9696

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jamalib@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research Tabriz University of Medical Sciences

Expected recruitment start date

2013-04-25, 1392/02/05

Expected recruitment end date

2014-07-06, 1393/04/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessing the Simultaneous effect of dill (Anethum Graveolens) extract supplementation with regular aerobic exercise on cardiovascular risk factors in hyperlipidemic patients

Public title
Effects of Dill extract and regular aerobic exercise in the treatment of hyperlipidemic patients
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria: hyperlipidemic patients with cholesterol and triglyceride are 200 to 300 mg/dl; The ages ranged between 20 to 50 years; have a BMI between 30 to 35; lack of use non prescription drugs; herbal supplements and other blood lipids that reduce supplements; Lack of regular aerobic activity per week. Exclusion criteria: having systemic problems; including mobility limitations; acute cardiovascular disease; lung diseases and other physical problemsthat is risk for subjects; Lack of adhere to the study protocol; Smoking and Consumption of alcoholic beverages.
Age
From **20 years** old to **50 years** old
Gender
Male

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features
In this study, participants who have the inclusion criteria will be randomly at one of four groups.

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Tabriz University of Medical Sciences
Street address
Research Vice Chancellor, Tabriz University of Medical Sciences, Golgasht street, Tabriz
City
Tabriz
Postal code
Approval date
2014-08-23, 1393/06/01
Ethics committee reference number
5.4.4949

Health conditions studied

1

Description of health condition studied
Hyperlipidemia
ICD-10 code
E78
ICD-10 code description
Disorders of lipoprotein metabolism and other lipidaemias

Primary outcomes

1

Description
Total cholesterol (TC)
Timepoint
Before intervention, two months after the intervention
Method of measurement
mg/dl

2

Description
Triglyceride (TG)
Timepoint
Before intervention, two months after the intervention
Method of measurement
mg/dl

3

Description
Low-density lipoprotein (LDL-C)
Timepoint
Before intervention, two months after the intervention
Method of measurement
mg/dl , TC-(HDL+TG/5)

4

Description
High-density lipoprotein (HDL-C)
Timepoint
Before intervention, two months after the intervention
Method of measurement
mg/dl

5

Description
C-reactive protein (hs-CRP)
Timepoint

Before intervention, two months after the intervention
Method of measurement
mg/dl

6

Description
Malondialedehyde (MDA)
Timepoint
Before intervention, two months after the intervention
Method of measurement
nmol/ml

Secondary outcomes

1

Description
Body Mass Index(BMI)
Timepoint
Before intervention, two months after the intervention.
Method of measurement
Weight /square of height

2

Description
body fat Percentage
Timepoint
Before intervention, two months after the intervention
Method of measurement
Jackson & Pollock of three point formula

3

Description
Weight
Timepoint
قبل از مداخله، دو ماه بعد از مداخله
Method of measurement
digital scale

4

Description
Dietary components
Timepoint
The two-day dietary recalls
Method of measurement
Using the Food Processor software

Intervention groups

1

Description
Intervention group 1: This group will be received the dill extract with a daily dose 2 mg/kg/day that total amount will be consumed in three servings and for eight weeks.
Category
Treatment - Drugs

2

Description
Intervention group 2: This group will be attend in aerobic exercise for 45 minutes with 60 to %70 of maximum heart rate reserve and three sessions aerobic exercise per week and for eight weeks.
Category
Other

3

Description
Intervention group 3: This group will be received the dill extract with a daily dose 2 mg/kg/day that total amount will be consumed in three servings and will be attend in aerobic exercise for 45 minutes with 60 to %70 of maximum heart rate reserve and three sessions aerobic exercise per week and for eight weeks.
Category
Treatment - Drugs

4

Description
Control group: This group will continue their normal routine during study.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Emam Reza Medical Reseach & Training Haspital
Full name of responsible person
Dadgar
Street address
Emam Reza Medical Reseach & Training Haspital, Golgasht Street, Tabriz
City
Tabriz

2

Recruitment center
Name of recruitment center
Sheykh Alraes Specialized and Ultra Specialized clinics
Full name of responsible person
Dadgar
Street address
Sheykh Alraes Specialized and Ultra Specialized clinics, Azadi street, Tabriz
City
Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research Tabriz University of Medical Sciences

Full name of responsible person

Dr Alireza ostadrahimi

Street address

Vice chancellor for research, Tabriz University of Medical Sciences, Golgasht Street, Tabriz

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research Tabriz 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

Tabriz University of Medical Sciences

Full name of responsible person

Akram Amaghani

Position

MSc/ Exercise Physiology

Other areas of specialty/work

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Bahram Jamali Qarakhanlou

Position

Ph.D student

Other areas of specialty/work

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Person responsible for updating data

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Akram Amaghani

Position

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Other areas of specialty/work

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Fax

Email

ameghania@tbzmed.ac.ir

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