

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 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 cardiovascular and lung disease; Smoking and Consumption of alcoholic beverages. **main outcome measures:** Colesterol, 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)

Phone

+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 problems that 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

Malondialdehyde (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

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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