

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

A Study on the Effect of Conjugated Lionleic Acid Supplementation on Body Composition, Blood Glucose, Serum Insulin, Serum Leptin and Lipid Profile in Obese Adults (18-45) of both genders

Protocol summary

Summary

This study has been designed aiming at study of the effect of CLA on the indices of weight, waist size, fat and lean body mass, serum level of Leptin and serum insulin, insulin resistance, level of glucose and serum lipid patterns. This study will be conducted using the random clinical trial method of controlled double blind type with placebo on 60 obese adults of both genders (18-45) with a BMI given as 30-34.9 kg/m². The individuals were chosen from among the clients referring to the Clinic of Nikan Hospital in the city of Tehran using randomized parallel sampling method with a three months of intervention. The people will randomly received a daily amount of 3 g CLA (three 1000 mg capsules) or placebo (three 500 mg capsules containing paraffin oil). The study arrival criteria are given as follows: No weight loss or gain over 2 kg in the recent three months, the samples should have no record of diabetes, cardiac disorders, cerebral stroke, suffering from renal and hepatic diseases, chronic inflammatory diseases, thyroid diseases and gastroenterological diseases, not consuming hypoglycemic medicines, blood-pressure lowering drugs or anti blood pressure medicines, beta blockers, sterogene, progesterone, not consuming any kinds of supplementations such as antioxidant vitamins, minerals, Omega 3 and CLA within two months prior to commencement of study, smoking, using alcoholic drinks, no respiratory or joint complications, not being pregnant or breastfeeding and having no intention for getting pregnant. Moreover, the samples suffering from specific complications such as epigastric pains will be excluded from this study. The female samples will be excluded from this project in case of pregnancy.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014052413678N2**

Registration date: **2014-08-26, 1393/06/04**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2014-08-26, 1393/06/04

Registrant information

Name

Saeed Ghavamzadeh

Name of organization / entity

Urmia University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 44 1278 0803

Email address

ghavamzadeh_s@umsu.ac.ir

Recruitment status

Recruitment complete

Funding source

Urmia University Of Medical Sciences

Expected recruitment start date

2014-08-23, 1393/06/01

Expected recruitment end date

2014-09-23, 1393/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A Study on the Effect of Conjugated Lionleic Acid Supplementation on Body Composition, Blood Glucose, Serum Insulin, Serum Leptin and Lipid Profile in Obese Adults (18-45) of both genders

Public title

A Study on the Effect of Conjugated Lionleic Acid Supplementation on Body Weight loss

Purpose

Treatment

Inclusion/Exclusion criteria

obese adults of both genders (18-45) with a BMI given as 30-34.9 kg/m²:No weight loss or gain over 2 kg in the recent three months:the samples should have no record of diabetes:cariad disorders:record of angina pectoris, myocardial infarction, cerebral stroke, suffering from renal and hepatic diseases: chronic inflammatory diseases: thyroid diseases and gastroenterological diseases: not consuming hypoglycemic medicines: blood-pressure lowering drugs or anti blood presure medicines: beta blockers: steregene: porgesterone: not consuming any kinds of supplementations such as antioxidant vitamins: minerals: Omega 3 and CLA within two months prior to commencement of study: smoking: using alcoholic drinks: no respiratory or joint complications: not being pregnant or breastfeeding and having no intention for getting pregnant. Moreover, the samples suffering from specific complications such as epigasteric pains will be excluded from this study: The female samples will be excluded from this project in case of pregnancy.

Age

From **75 years** old to **48 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Urmia University of Medical Sciences

Street address

Nutrition Department, Faculty of Medicine, College of Medicine, Urmia University of Medical Science, 11th km of Nazloo Road, Urmia

City

Urmia

Postal code

00984412780300

Approval date

2014-01-28, 1392/11/08

Ethics committee reference number

umsu.rec.1392.202

Health conditions studied**1****Description of health condition studied**

Obesity

ICD-10 code

E66.9

ICD-10 code description

Obesity, unspecified

Primary outcomes**1****Description**

Age

Timepoint

Before Intervention

Method of measurement

Life years from birth based on birth certificate card

2**Description**

sex

Timepoint

Before Intervention

Method of measurement

with questionnaire

3**Description**

weight

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Kg/scale

4**Description**

height

Timepoint

Before Intervention

Method of measurement

Meter/ribor meter

5

Description

BMI

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Ratio of weight (kg) to height square (m)

6

Description

FM%

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Percentage/Body Analyzer

7

Description

FFM%

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Percentage/Body Analyzer

8

Description

FBS

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

9

Description

Cholesterol

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

10

Description

TG

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

11

Description

VLDL

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

12

Description

LDL

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

13

Description

HDL

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl/enzymatic method

14

Description

Leptin

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Mg/dl /ELIZA

15

Description

Waist Size

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Cm/ribbon meter

16

Description

Insulin Resistance

Timepoint

Before Intervention and three months after Intervention

Method of measurement

HOMA-IR (Homeostasis Model Assessment of Insulin Resistance) is the same resistance to insulin index which is calculated as follows. $405 / ((\text{dl/mg}) \text{ fasting glucose concentration} * (\text{ml/micro unit}) \text{ active fasting insulin concentration})$

17

Description

Insulin

Timepoint

Before Intervention and three months after Intervention

Method of measurement

Micro unit per ml/ELIZA

18

Description

Carbohydrate Intake

Timepoint

Before Intervention and three months after Intervention

Method of measurement

gr/day

19

Description

Protein Intake

Timepoint

Before Intervention and three months after Intervention

Method of measurement

gr/day

20

Description

Fat Intake

Timepoint

Before Intervention and three months after Intervention

Method of measurement

gr/day

21

Description

Energy Intake

Timepoint

Before Intervention and three months after Intervention

Method of measurement

kcal/day

Secondary outcomes

1

Description

gastroenterological side effects

Timepoint

During Intervention

Method of measurement

Taking Report

Intervention groups

1

Description

After collecting the initial data, The case group will received daily amount of 3 g CLA (three 1000 mg soft gels) Three times a day Before main Meals for 3 Months.

Category

Placebo

2

Description

The control group will received a daily amount of 1/5 gr placebo (three 500 mg soft gel containing paraffin oil) three times a day before main meals for three months.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Nikan Hospital

Full name of responsible person

Fatemeh Esmaeili Shahmirzadi

Street address

Bistodoye Bahman, Ave Aghdasiyeh, Sq Tehran-Iran.

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Urmia University of Medical Science

Full name of responsible person

Dr. Saeed Ghavamzadeh

Street address

Nutrition Department, Faculty of Medicine, College of Medicine, Urmia University of Medical Science, 11th km of Nazloo Road, Urmia

City

Urmia

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Urmia University of Medical Science

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

Person responsible for scientific inquiries

Contact

Name of organization / entity

Urmia University of Medical Sciences

Full name of responsible person

Dr. Saeed Ghavamzadeh

Position

Specialty Doctorte Degree inNutritioal Science
AndUrmia University Assistant Professor

Other areas of specialty/work

Street address

University of Medical Science, 11th km of Nazloo
Road, Urmia

City

Urmia

Postal code

5715799313

Phone

+98 44 3278 0803

Fax

+98 44 3278 0801

Email

Ghavamzadeh@hotmail.comghavamzadeh_s@umsu.a
c.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Urmia University of Medical Science

Full name of responsible person

Dr. Saeed Ghavamzadeh

Position

Specialty Doctorte Degree In Nurtitional
Science/Urmia Universityof Medical Science Assistant
Profes

Other areas of specialty/work

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km of Nazloo Road, Urmia

City

Urmia

Postal code

5715799313

Phone

+98 44 3278 0803

Fax

+98 44 3278 0801

Email

Ghavamzadeh@hotmail.comghavamzadeh_s@umsu.a
c.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