Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Effects of zinc supplementation on mood، serum inflammatory factors and antropometric indices in obese subjects

Protocol summary

Summary

1. Objectives: Previous studies have shown that serum zinc is lower in obese subjects and low serum zinc is associated with depression. The aim of the present study is to determine effects of zinc supplementation on mood, serum inflammatory factors and anthropometric indices in obese subjects. 2.Design: double blind randomized placebo controlled trial 3. Setting and conduct: Fifty obese subjects will be randomly allocated into two groups to receive daily either 30 mg zinc or placebo for 12 weeks. Ten milliliters of fasting blood samples will be collected at baseline and after intervention. Mood state, serum inflammatory factors and anthropometric indices will be measured at the baseline and after intervention. 4. Participants : Healthy obese subjects aged 18-35 years with a BMI≥ 30 Kg/Im² who are not pregnant and do not smoke. 5.Intervention: 30 mg zinc or placebo for 12 weeks 6.Main outcome measures variables: mood state, CRP, TNF-α, weight and body composition

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201106122394N5**
Registration date: **2012-04-04, 1391/01/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2012-04-04, 1391/01/16

Registrant information

Name

Shima Jazayeri

Name of organization / entity

Iran University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor of Research, Tehran University of Medical Sciences

Expected recruitment start date

2011-01-02, 1389/10/12

Expected recruitment end date

2011-07-02, 1390/04/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of zinc supplementation on mood، serum inflammatory factors and antropometric indices in obese subjects

Public title

Effects of zinc supplementation on mood, serum inflammatory factors and antropometric indices in obese subjects

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Willing to participate; Age 18 to 35 years old;BMI≥ 30 Kg/m²;Being healthy;Not Taking any supplements or drugs during the previous 3 months; Exclusion criteria: Pregnancy; lactation;Smoking;

Age

From **18 years** old to **35 years** old

Gender
Both

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **50**
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
Ethics committee of Tehran University of Medical Sciences
Street address
Tehran University of Medical Sciences, Ghods St., Keshavarz Blvd, Tehran, Iran.
City
Tehran
Postal code
Approval date
2011-12-25, 1390/10/04
Ethics committee reference number
13515

Health conditions studied

1

Description of health condition studied
obesity
ICD-10 code
E66
ICD-10 code description
Obesity due to excess calories

Primary outcomes

1

Description
Mood
Timepoint
At baseline, after 12 weeks
Method of measurement
Beck Depression Inventory

2

Description
hsCRP
Timepoint
At baseline, after 12 weeks
Method of measurement
ELISA

3

Description
TNFα
Timepoint
At baseline, after 12 weks
Method of measurement
ELISA

4

Description
Weight
Timepoint
At baseline, after 12 weeks
Method of measurement
Weighting

5

Description
Body composition
Timepoint
At baseline, after 12 weeks
Method of measurement
Bioelectrical impedance analysis (BIA)

Secondary outcomes

empty

Intervention groups

1

Description
Zinc supplement: 30mg daily, after lunch for 12 weeks
Category
Prevention

2

Description
Placebo: one tablet daily, after lunch, for 12 weeks.
Category
Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center
Tehran University of Medical Sciences

Full name of responsible person
Zahra Solati, Master Student

Street address
Tehran University of Medical Sciences, Pour Sina St., Enghelab Sq.

City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice-chancellor for research, Tehran University of Medical Sciences

Full name of responsible person
Dr. Akbar Fotouhi

Street address
Tehran University of Mdical Sciences, Ghods Street, Keshavarz Blvd, Tehran, Iran

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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, Tehran 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

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Student

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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