

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Assessment of the efficacy of Vitamin D supplementation comparing to placebo on antioxidant capacity and symptoms ADHD in Students 6-13 years old whit ADHD

#### Protocol summary

##### Summary

This study is randomized, clinical trial, single center and double-blind for patients and researchers. The aim of this study is to evaluate the effects of treatment with vitamin D on antioxidant capacity and ADHD symptoms in Students 6-13 years with ADHD that is controlling by Placebo. Inclusion criteria: Age group participants is 6-13 years; Non-having other chronic diseases; Lack of consumption of Vitamin D supplementation from two months before the intervention; Lack of consumption of Selenium, Calcium, Vitamin C, Vitamin E, Omega3 and Zinc supplementations from one month before the intervention. Exclusion criteria: The use of methods such as Neurofeedback, Play-therapy and parenting education during the intervention; nonconsent of parents for the continued cooperation During the study. Sample of the study includes 84 of Patients (42 patients in the Vitamin D group and 42 patients in the Placebo group). The intervention group consume 1000 IU of Vitamin D3 daily for 12 weeks and control group in the same period, consume Placebo. ADHD symptoms in both groups, with the score SDQ (Strengths and Difficulties Questionnaire), CPQ (Conners Parent Questionnaire) and CPT (Continue performances Test) are evaluated before and after the intervention. 25(OH) vitamin D, total Antioxidant Capacity, Malon Di Aldehyde, Glutathione and Catalase of participants serum in two groups before and after intervention measured by Elisa and Spectrophotometry methods.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2016120331212N1**

Registration date: **2017-02-09, 1395/11/21**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-02-09, 1395/11/21

##### Registrant information

###### Name

Forugh Fasihi

###### Name of organization / entity

Isfahan University of Medical Sciences, School of Nutrition and Food Sciences, Dept

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 4426 7331

###### Email address

am.alavi@nutr.mui.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice chancellor for Research Isfahan University of Medical Sciences

##### Expected recruitment start date

2015-08-23, 1394/06/01

##### Expected recruitment end date

2015-10-22, 1394/07/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Assessment of the efficacy of Vitamin D supplementation comparing to placebo on antioxidant capacity and symptoms ADHD in Students 6-13 years old whit ADHD

## Public title

The effects of Vitamin D supplementation on ADHD symptoms and antioxidant capacity in Students 6-13 years old whit ADHD

## Purpose

Treatment

## Inclusion/Exclusion criteria

Inclusion criteria: Age group participants is 6-13 years; Non-having other chronic diseases; Lack of consumption of Vitamin D supplementation from two months before the intervention; Lack of consumption of Selenium, Calcium, Vitamin C ,Vitamin E, Omega3 and Zinc supplementations from one month before the intervention. Exclusion criteria: The use of methods such as neurofeedback, play-therapy and parenting education during the intervention; nonconsent of parents for the continued cooperation During the study .

## Age

From **6 years** old to **13 years** old

## Gender

Both

## Phase

2-3

## Groups that have been masked

*No information*

## Sample size

Target sample size: **84**

## 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 Isfahan University of Medical Sciences

##### Street address

Isfahan University of Medical Sciences, Hezarjerib Street, Isfahan

##### City

Isfahan

##### Postal code

8174673461

#### Approval date

2016-02-21, 1394/12/02

#### Ethics committee reference number

ir.mui.rec.1394.3.886

## Health conditions studied

### 1

#### Description of health condition studied

Attention Deficit Hyperactivity Disorder

#### ICD-10 code

f90

#### ICD-10 code description

Hyperkinetic disorders

## Primary outcomes

### 1

#### Description

25(OH)Vitamin D3

#### Timepoint

before entering to the study and 12 weeks after Vitamin D or placebo consumption

#### Method of measurement

serum level measurement

### 2

#### Description

Attention

#### Timepoint

before entering to the study and 12 weeks after Vitamin D or placebo consumption

#### Method of measurement

continue performance test score

### 3

#### Description

Impulsive

#### Timepoint

before entering to the study and 12 weeks after Vitamin D or placebo consumption

#### Method of measurement

continue performance test score

### 4

#### Description

behaviral disorder

#### Timepoint

before entering to the study and 12 weeks after Vitamin D or placebo consumption

#### Method of measurement

Strengths and Difficulties Questionnaire score

### 5

#### Description

Antioxidant Capacity of serum

#### Timepoint

before entering to the study and 12 weeks after Vitamin D or placebo consumption

#### Method of measurement

serum level measurement

## Secondary outcomes

### 1

#### Description

Body Mass Index

#### Timepoint

before entering to the study and 12 weeks after vitamin D or Placebo consumption

#### Method of measurement

Digital scale and meter

### 2

#### Description

Food receives

#### Timepoint

before entering to the study & 12 weeks after drug or placebo consumption

#### Method of measurement

Food record

## Intervention groups

### 1

#### Description

The intervention group consume 1000 IU Vitamin D3 supplementation daily in during 12 weeks.

#### Category

Treatment - Other

### 2

#### Description

The control group consume Placebo daily in during 12 weeks intervention.

#### Category

Placebo

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Behavioral Sciences Research Center, Isfahan University of Medical Sciences

##### Full name of responsible person

Amir Mansuor Alavi

##### Street address

Khorshid Psychiatry Center, Darvazehdolat Street, Isfahan

##### City

Isfahan

## Sponsors / Funding sources

### 1

#### Sponsor

Name of organization / entity

Vice chancellor for research Isfahan University of Medical Sciences

#### Full name of responsible person

Prof Mehdy Nematbakhsh

#### Street address

Vice chancellor for research, No 4 Bulding, Isfahan University of Medical Sciences, Hezarjerib street, Isfahan

#### City

Isfahan

#### 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 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, School of Nutrition and Food Sciences

##### Full name of responsible person

Dr Amir Mansour Alavi Naiini

##### Position

Nutrition Science PHD

##### Other areas of specialty/work

##### Street address

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## Person responsible for scientific inquiries

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**Full name of responsible person**

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**Position**

Msc Student Nutrition Science

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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*