# School Nutrition to Improve Behaviour

Submission date	<b>Recruitment status</b> No longer recruiting	Prospectively registered		
13/04/2010		Protocol		
Registration date	Overall study status	Statistical analysis plan		
07/06/2010	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
12/12/2017	Nutritional Metabolic Endocrine			

# Plain English summary of protocol

Background and study aims

A lack of long-chain omega 3 fatty acids, vitamins and minerals in the diet has been linked to antisocial behavior; correcting such deficiencies may therefore improve children's behaviour. We aimed to test the effects on behaviour of omega 3, mineral and vitamin supplements in UK adolescents.

# Who can participate?

All year 10 pupils (male and female, aged 14 - 16 years) in the Robert Clack School will be asked to volunteer for the study.

# What does the study involve?

Participants are randomly allocated to take either capsules containing the recommended intake of vitamins, minerals and omega 3 fatty acids, or identical looking and tasting placebo capsules, for 3 months. Blood samples are taken before and after supplementation and any changes in behaviour are measured using teacher rating scales together with school disciplinary records.

What are the possible benefits and risks of participating? Participants' behaviour may improve. There are minimal risks.

Where is the study run from? University of Oxford (UK).

When is the study starting and how long is it expected to run for? May 2010 to November 2011.

Who is funding the study? Esmee Fairbairn Trust (UK)

Who is the main contact? Prof John Stein john.stein@dpag.ox.ac.uk

# Contact information

# Type(s)

Scientific

#### Contact name

Prof John Stein

#### **ORCID ID**

http://orcid.org/0000-0001-5843-8986

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

RCSP3

# Study information

#### Scientific Title

Nutritional supplements to improve disadvantaged pupils' cognitive skills and behaviour: a double-blind randomised placebo-controlled trial

#### Acronym

**SNIB** 

# Study objectives

Can supplementation with capsules of vitamins, minerals and omega 3 fatty acids designed to bring levels up to recommended daily intakes significantly improve disadvantaged pupils' antisocial behaviour?

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

South West Research Ethics Committee pending as of 13/04/2010 (ref: 10/HO206/13)

# Study design

Double-blind randomised placebo-controlled trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

School

# Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# Health condition(s) or problem(s) studied

Nutrition/antisocial behaviour

#### **Interventions**

3 months administration of capsules containing recommended intake of vitamins, minerals (1 capsule) and omega 3 fatty acids (2 capsules) or identical looking and tasting placebo capsules. Follow-up is for 3 months.

# Intervention Type

Supplement

#### Phase

**Not Specified** 

# Drug/device/biological/vaccine name(s)

Vitamins, minerals, omega 3 fatty acids

# Primary outcome measure

Current primary outcome measure(s) as of 24/04/2012

Offences against disciplinary rules, recorded by the School Pupil Referral Unit and Learning Support Centre and other school discipline databases

Measured at:

Time 1: in the 12 weeks prior to randomisation

#### Previous primary outcome measure(s)

Offences against disciplinary rules, recorded by the School Pupil Referral Unit and Learning Support Centre

#### Measured at:

Time 1: week 0, before randomisation Time 2: last week (12) of intervention

# Secondary outcome measures

Current secondary outcome measure(s) as of 24/04/2012

- 1. Computerised measurements of changes in cognitive skills: reading spelling, short term memory, nonverbal intelligence, Teacher ADHD assessments.
- 2. Correlation of disciplinary and cognitive changes with changes in nutrient blood levels irrespective of whether allocated active or placebo

#### Previous secondary outcome measure(s)

- 1. Computerised measurements of cognitive skills: reading, spelling, mathematics, rapid visual processing, attention, impulsivity
- 2. Correlation of changes in participants' blood levels of essential micronutrients with changes in cognitive skills and antisocial behaviour

#### Measured at:

Time 1: week 0, before randomisation Time 2: last week (12) of intervention

# Overall study start date

01/05/2010

# Completion date

30/11/2011

# **Eligibility**

# Key inclusion criteria

All year 10 pupils (male and female, aged 14 - 16 years) in the Robert Clack School will be asked to volunteer for the study

# Participant type(s)

Patient

# Age group

Child

# Lower age limit

14 Years

# Upper age limit

16 Years

#### Sex

Both

# Target number of participants

200

# Key exclusion criteria

- 1. Major medical disorders
- 2. Taking psychoactive medications expected to affect behaviour and learning

- 3. Taking vitamin supplements or fish oils already, or eating fish greater than 2 x week
- 4. Poor English

# Date of first enrolment

01/05/2010

#### Date of final enrolment

30/11/2011

# Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre University of Oxford

Oxford United Kingdom OX1 3PT

# Sponsor information

#### Organisation

University of Oxford (UK)

#### Sponsor details

Clinical Trials and Research Governance Rm 8, Manor House Oxford England United Kingdom OX3 9DZ +44 (0)1865 222757 heather.house@admin.ox.ac.uk

#### Sponsor type

University/education

#### Website

http://www.ox.ac.uk/

#### **ROR**

https://ror.org/052gg0110

# Funder(s)

# Funder type

Charity

# Funder Name

Esmee Fairbairn Trust (UK) (ref: 09-2343)

# **Results and Publications**

# Publication and dissemination plan

To be confirmed at a later date

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Available on request

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	28/01/2016		Yes	No