

School Nutrition to Improve Behaviour

Submission date 13/04/2010	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 07/06/2010	Overall study status Completed	<input type="checkbox"/> Protocol
Last Edited 12/12/2017	Condition category Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

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

<https://orcid.org/0000-0001-5843-8986>

Contact details

Physiology Department

Sherrington Building

Parks Road

Oxford

United Kingdom

OX1 3PT

+44 (0)1865 272552

john.stein@dpag.ox.ac.uk

Additional identifiers

Protocol serial number

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

Study type(s)

Treatment

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(s)

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

Key secondary outcome(s)

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

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

Healthy volunteers allowed

No

Age group

Child

Lower age limit

14 years

Upper age limit

16 years

Sex

All

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

United Kingdom

England

Study participating centre

University of Oxford
Oxford
United Kingdom
OX1 3PT

Sponsor information

Organisation

University of Oxford (UK)

ROR

<https://ror.org/052gg0110>

Funder(s)

Funder type

Charity

Funder Name

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

Results and Publications

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