

The effect of nutritional supplementation on retinal function

Submission date 21/09/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 01/10/2009	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 12/04/2017	Condition category Eye Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
The effect of nutritional supplementation on retinal function: a randomised controlled trial

Study objectives
Nutritional supplementation may have an effect on retinal function. A randomised controlled trial comparing those taking a nutritional supplement with a control group.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Aston University Ethics Committee, 01/10/2008, ref: REG/06/288[1]

Study design

Single-blind single-centre randomised controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Age-related macular disease

Interventions

Nutritional supplement (oral) containing vitamin C 150 mg, vitamin E 15 mg, lutein 12 mg, zeaxanthin 0.6 mg, copper 400 µg, zinc 20 mg, omega-3 fatty acids 1,080 mg per day for 80 weeks.

Control group: no interventions (no placebo used)

Intervention Type

Supplement

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Vitamin C, vitamin E, lutein, zeaxanthin, copper, zinc, omega-3 fatty acids

Primary outcome(s)

Multifocal electroretinogram amplitudes and latencies, assessed every 20 weeks for a period of 80 weeks

Key secondary outcome(s)

Macular pigment optical density, assessed every 20 weeks for a period of 80 weeks

Completion date

31/12/2011

Eligibility**Key inclusion criteria**

All participants (both males and females) must be aged 18 - 80 years.

1. For early age-related maculopathy (ARM) group in either eye or both eyes:
 - 1.1. Drusen
 - 1.2. Drusen with hyperpigmentation
 - 1.3. Drusen with hypopigmentation
2. For early age-related maculopathy (ARM) group and normal group in either eye or both eyes:
 - 2.1. Best corrected visual acuity of 6/9 or better
 - 2.2. Good central fixation (necessary for the multifocal electroretinogram [mfERG])
 - 2.3. Clear optical media
 - 2.4. No signs of other retinal or optic nerve disease
 - 2.5. Good general health
 - 2.6. No medication that affects the retina

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

80 years

Sex

All

Key exclusion criteria

1. Moderate to dense lens opacities
2. Intraocular lens
3. Corneal opacities
4. Glaucoma or ocular hypertension
5. Previous history of intraocular inflammation (e.g. uveitis)
6. Previous history of retinal detachment
7. Retinal disease
8. Previous retinal laser
9. Diabetes
10. Systemic hypertension
11. History of ocular trauma
12. Neurological disease
13. Advanced age-related macular disease (choroidal neovascularisation [CNV] or geographic atrophy [GA]) in the studied eye
14. Drugs causing retinal toxicity (chloroquine, cisplatin, oxazepam, vigabatrin)
15. Previous ocular surgery (excluding laser-assisted in situ keratomileusis [LASIK]/endothelial keratoplasty [EK])
16. Epilepsy

Date of first enrolment

01/01/2009

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Aston University

Birmingham

United Kingdom

B4 7ET

Sponsor information

Organisation

Bausch and Lomb (UK)

ROR

<https://ror.org/0560gb543>

Funder(s)

Funder type

Industry

Funder Name

Bausch and Lomb (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes