

# A study on the spatial distribution and function of the macular pigment

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The aim of this study is to use different non-invasive techniques to measure the spatial distribution of the macular pigment and its possibly relation with retinal structure and contrast sensitivity.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Ocular structural change, deposit and degeneration NEC
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON30687

### Source

ToetsingOnline

### Brief title

A study on the spatial distribution and function of the macular pigment

### Condition

- Ocular structural change, deposit and degeneration NEC

### Synonym

age related macular degeneration

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Academisch Medisch Centrum

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** contrast sensitivity, macular pigment, retina

## Outcome measures

### Primary outcome

The spatial distribution of the macular pigment

Retinal thickness

Contrast sensitivity

### Secondary outcome

not applicable

## Study description

### Background summary

Lutein and zeaxanthin are the only carotenoids present in the macular pigment (MP) of the retina. Its exact meaning is unknown. Two hypotheses have been put forward. 1. To minimize chromatic aberration (Acuity Hypothesis); 2. To protect against age-related macular degeneration. Although both unproven yet, many supplements do contain already large amounts of lutein and/or zeaxanthin.

### Study objective

The aim of this study is to use different non-invasive techniques to measure the spatial distribution of the macular pigment and its possible relation with retinal structure and contrast sensitivity.

### Study design

Cross-sectional study.

### Study burden and risks

A session takes one hour per subject.

Due to the tropicamide used to ensure pupil dilation, driving of a car must be postponed for another two hours.

There are no risks. The use of the mydriaticum is 'standard procedure' in ophthalmology without any additional risks.

## Contacts

### **Public**

Academisch Medisch Centrum

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6202 AZ Maastricht  
Nederland

### **Scientific**

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### **Age**

Adults (18-64 years)  
Elderly (65 years and older)

### Inclusion criteria

aged 18 years and older  
visual acuity > 0.5

### Exclusion criteria

no known eye disease

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 03-04-2007

Enrollment: 40

Type: Actual

### Medical products/devices used

Registration: No

## Ethics review

Approved WMO

Date: 14-03-2007

Application type: First submission

Review commission: METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
CCMO	NL15898.068.07