



Michael Simpson

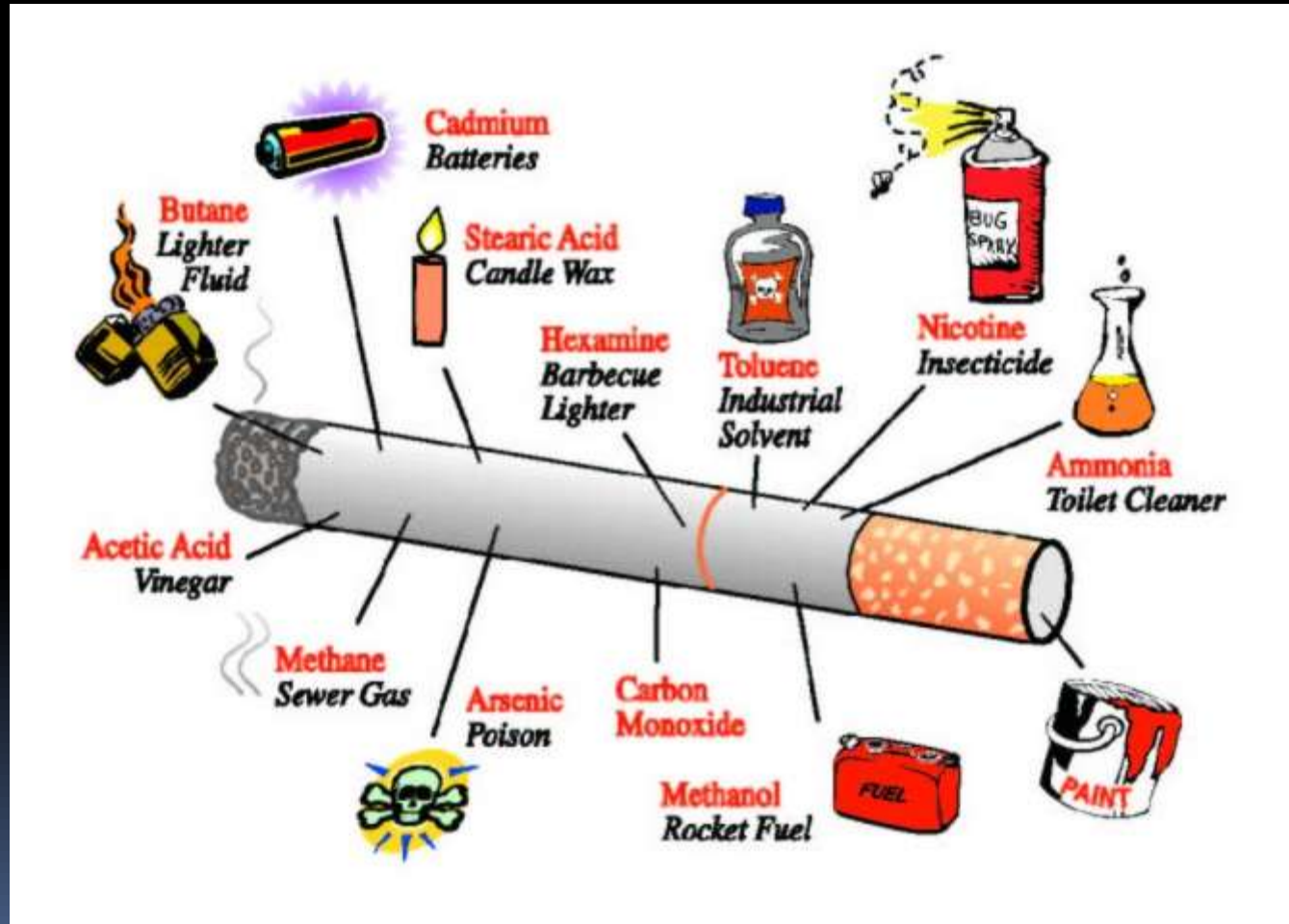
# SMOKE GETS IN YOUR EYES



# Background


- 4000 active compounds most are toxic
- 

# Toxic compounds






# Background

- 4000 active compounds most are toxic
  - Ischemic and oxidative mechanism
    - Reducing Oxygen
    - Damaging chemical reactions
- 




# Background

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  - Ischemic and oxidative mechanism
  - Affects 5 main areas
    - Cataracts
- 




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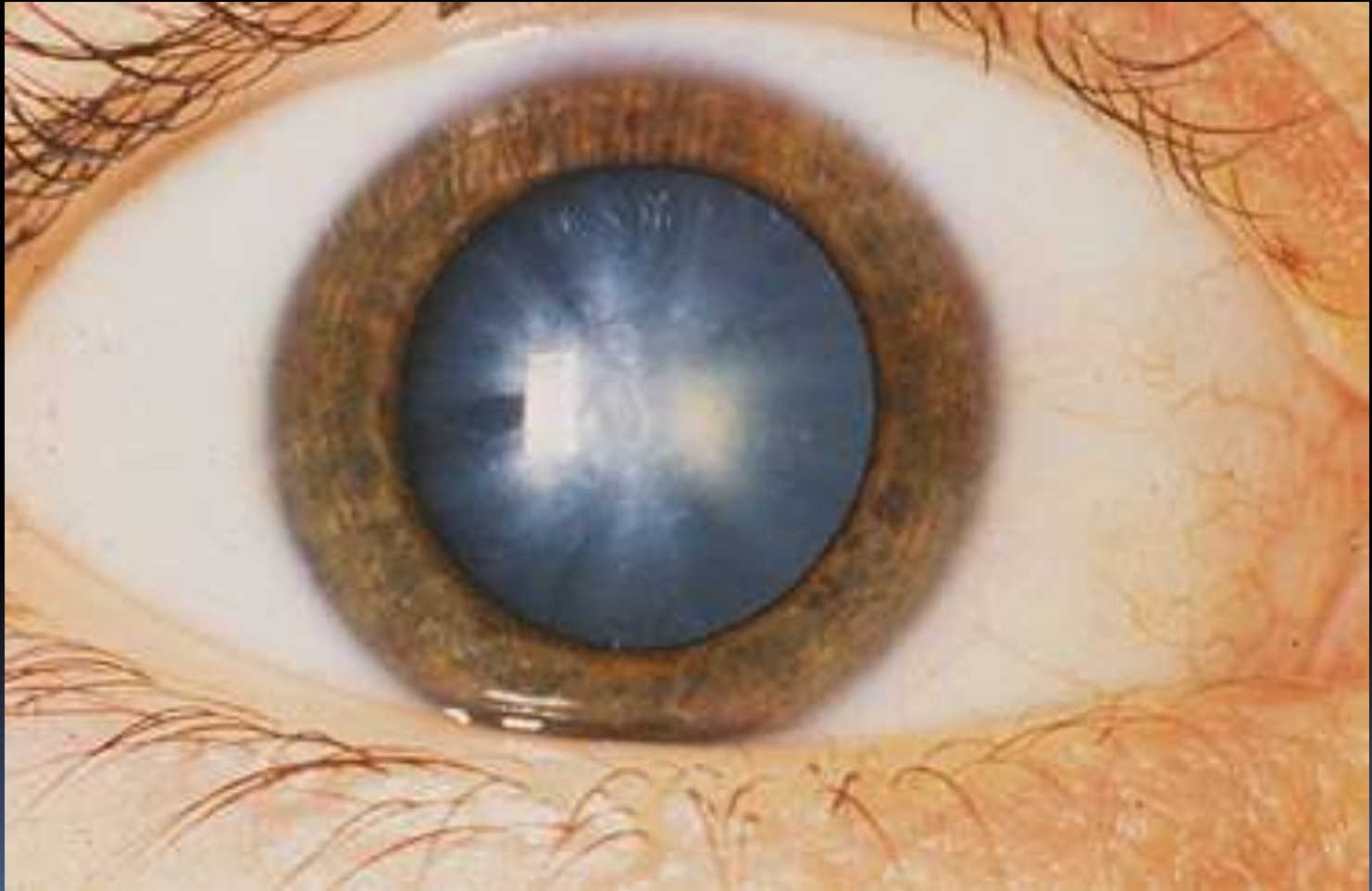
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    - Thyroid disease
    - Optic neuropathy
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# Cataracts


- Loss of transparency in the lens of the eye
- 

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  - Mainly forms nuclear cataracts
  - Smokers at double the risk
  - Dose related
  - Destruction of anti-oxidant nutrients
- 




# Age Related Macular Degeneration

- Small central area used for sensitive vision
- 



# Age Related Macular Degeneration

- Small central area used for sensitive vision
  - Blurred distorted blacked out
- 



# SIMPSON


A vertical bar on the left side of the page, consisting of several colored segments: a thin black segment at the top, followed by a thin grey segment, a thin yellow segment, and a thick pink segment at the bottom.

SIMSON






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  - Blurred distorted blacked out
  - Affects reading driving watching TV
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# Age Related Macular Degeneration

- Small central area used for sensitive vision
- Blurred distorted blacked out
- Affects reading driving watching TV
- AMD leading cause of blindness over 55
- Smokers 4 times the risk
- Smokers develop disease 10 years earlier
- 20% of new blindness in people over 50




# Diabetic Retinopathy

- Retinal blood vessels affected by high blood sugar levels




# Diabetic Retinopathy

- Retinal blood vessels affected by high blood sugar levels
  - Smoking accelerates the damage due to reduced Oxygen
- 




# Thyroid eye Disease

- Graves disease = Overactive thyroid causes protrusion of eyes, double vision, loss of vision.
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- Smokers have 4 times risk of eye complications
- Due to the effect on the immune system



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- Causes sudden painless loss of vision often permanent loss



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# Questions




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# **DIGITAL RETINAL PHOTOGRAPHY**



# Previous ways to record

- Hand drawing of the retinal vessels and structures such as Optic nerve and Macula
  - Polaroid or film photographs
  - Not at all
- 



# Digital Retinal Photos

- Consistent documentation
- 




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- Consistent documentation
  - Ability to magnify small details
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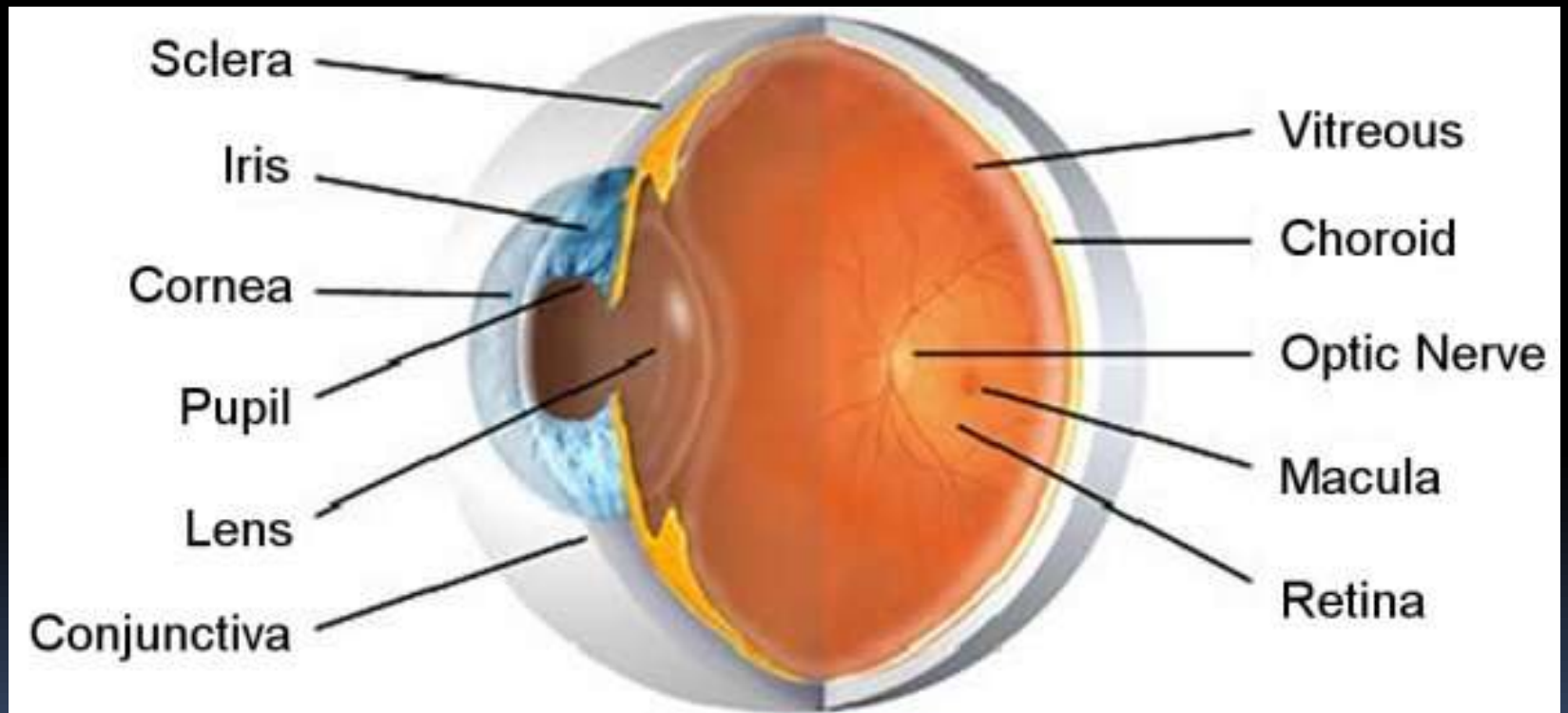
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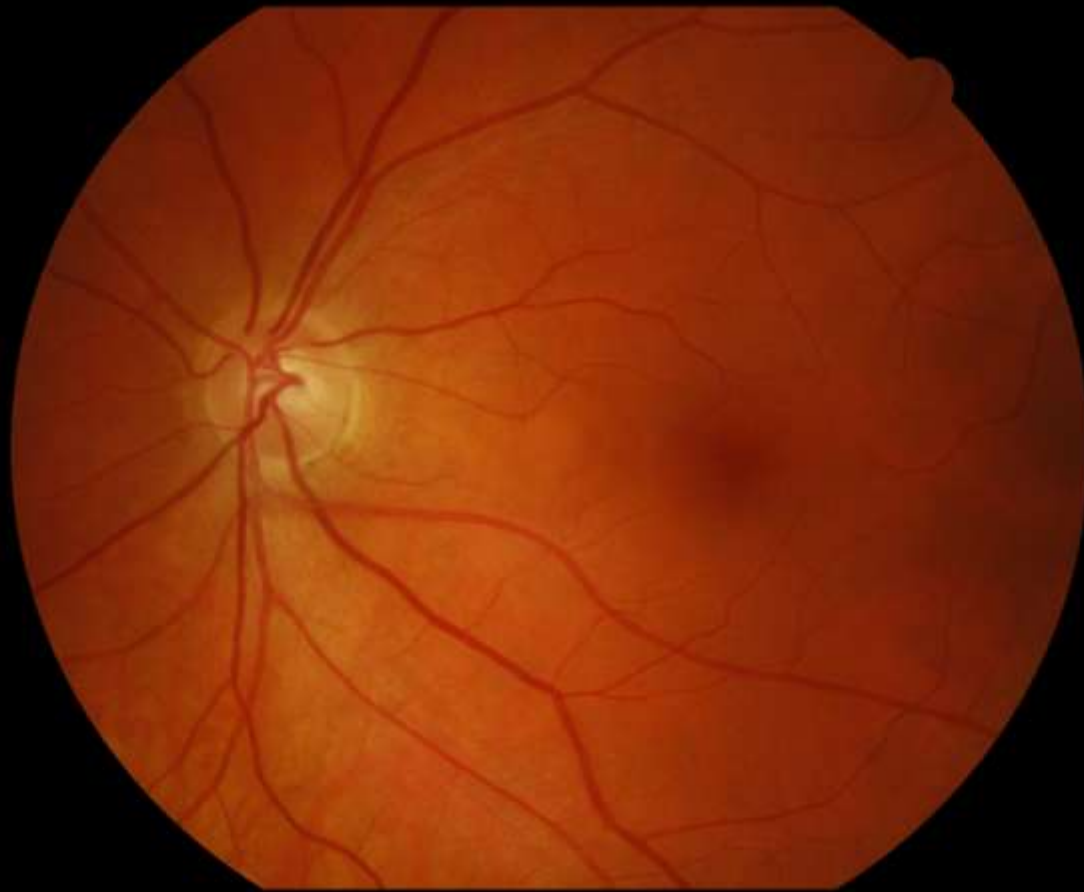
# Digital Retinal Camera



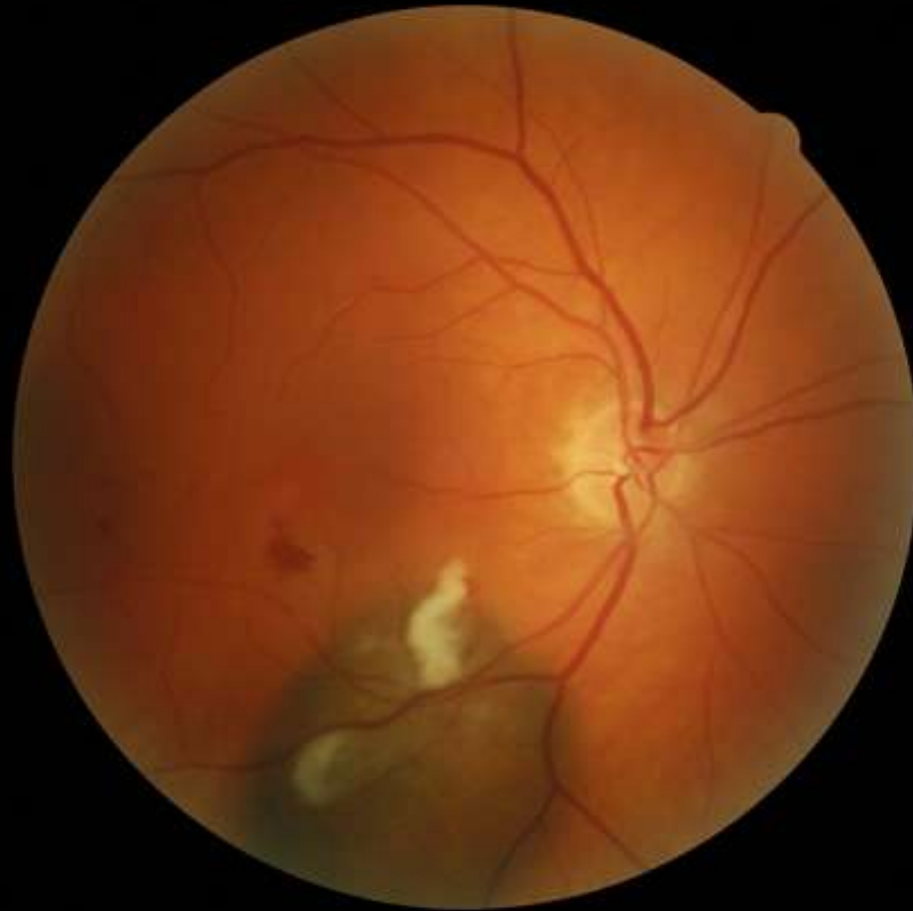
# The Eye



# Normal retina



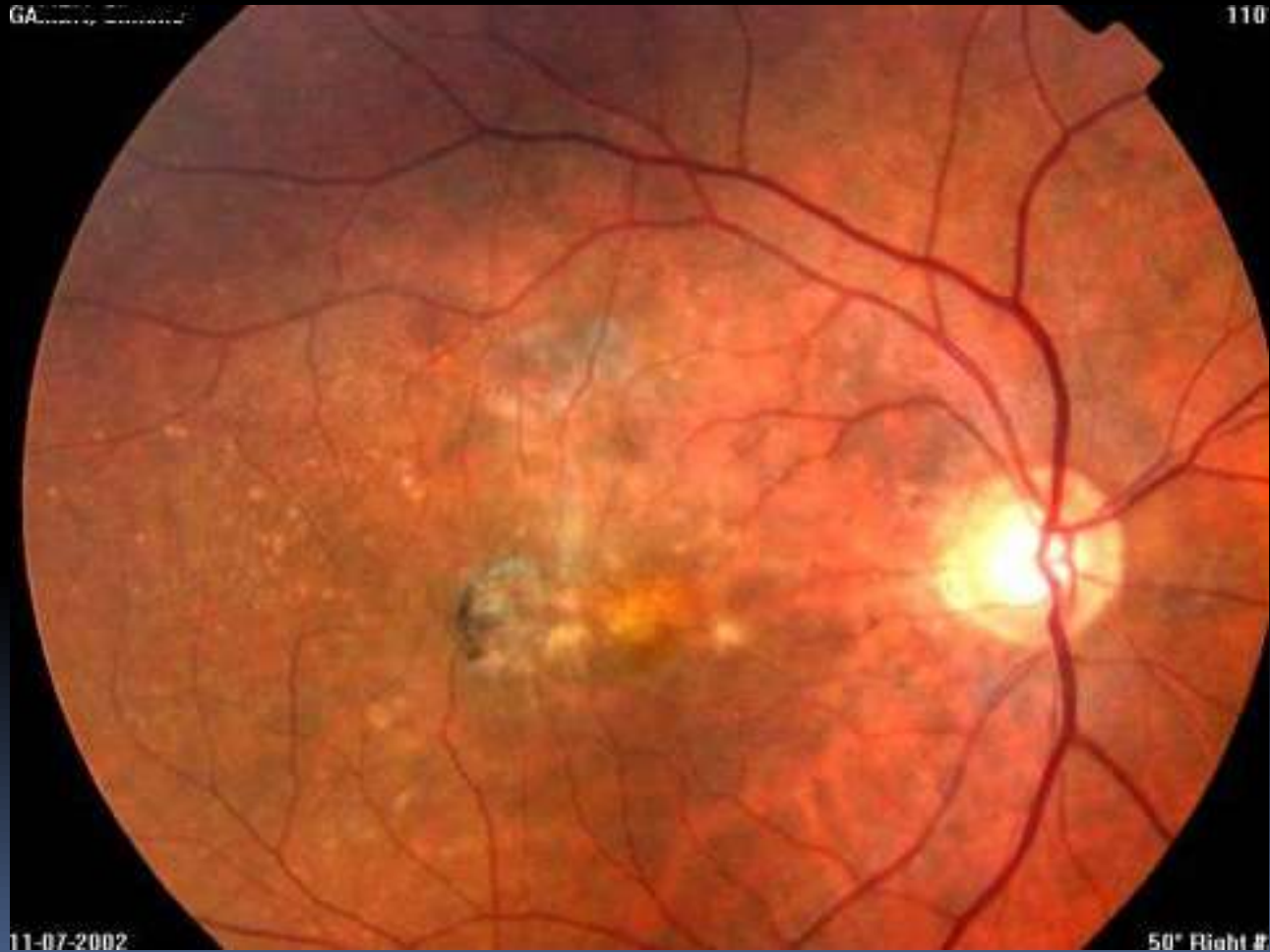
# Diabetic retina



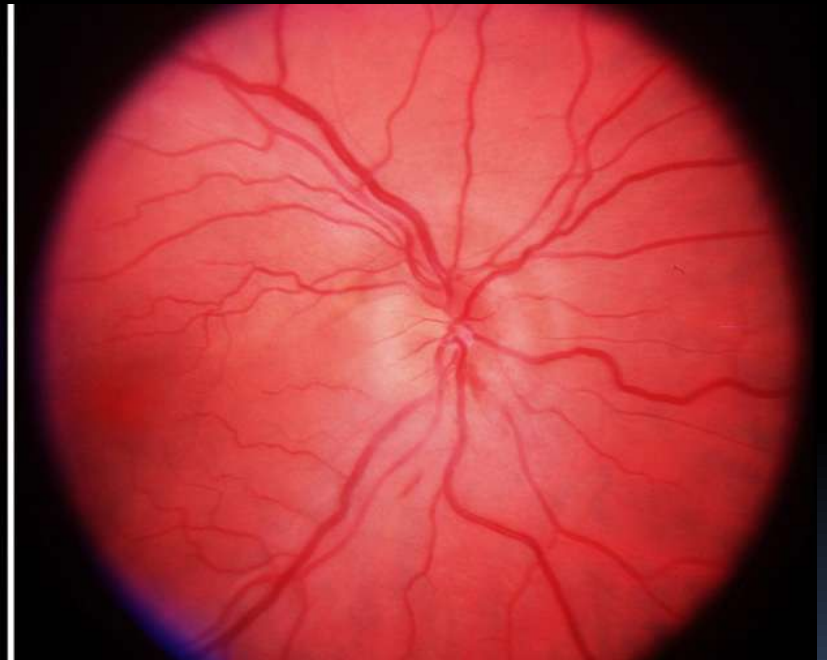
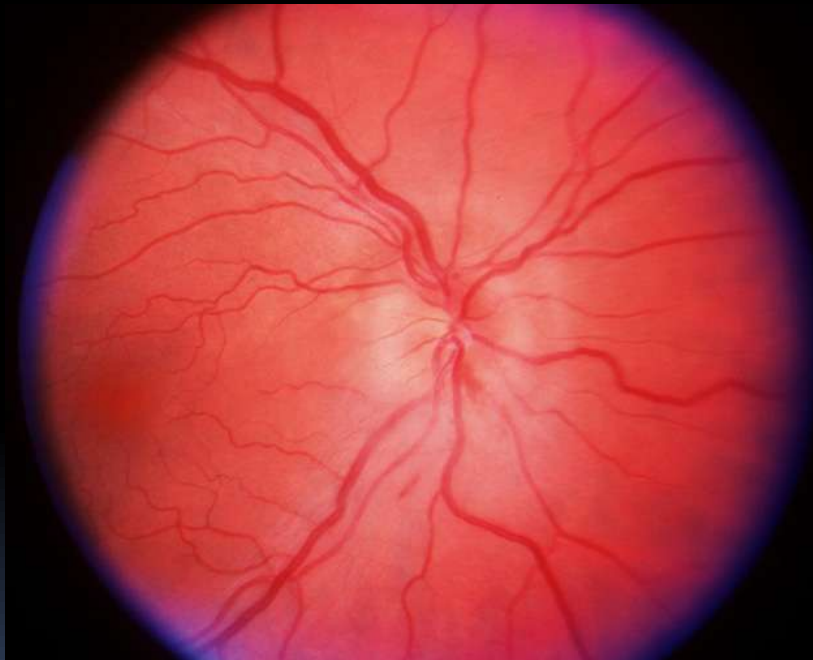
# Macula Degeneration



# Advanced Macula degeneration



# Ischemic optic atrophy





# Questions




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**READY MADE GLASSES FOR MY  
CUSTOM MADE EYES?**




# Low Cost Ready-made “Magnifiers”

- 85 % of people have different prescriptions in each eye
- 



## Low Cost Ready-made “Magnifiers”

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- 85 % of people have different prescriptions in each eye
- Astigmatism not corrected 35% of population
- Distance between eyes induces prism
- No cost or low cost with health cover
- Missed eye disease diagnosis

# Warning

## Reading Glasses

### Warning:

The lenses in these glasses are NOT prescription lenses. They are not intended to correct any PROBLEMS with your eyesight. POOR VISION is a result of: a need for correctly prescribed glasses OR a disease of the eye. Many eye diseases show no obvious signs or symptoms in the early stages. Therefore you should have your eyes examined regularly by an OPTOMETRIST or OPHTHALMOLOGIST. The young and ageing are most at risk.

made in China



# Questions