



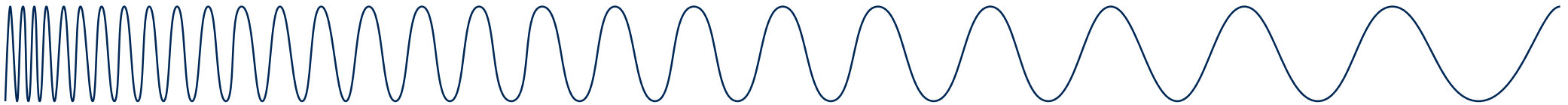
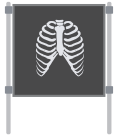
Omisan[®]
G R O U P

LUTEIN BASED EYE DROP
& LIGHT-RELATED DAMAGE PROTECTION

Omisan[®]







400nm

500nm

600nm

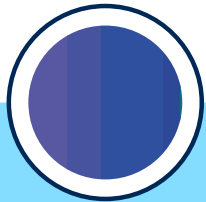
700nm

10^{-14} 10^{-13} **pm** 10^{-12} 10^{-11} 10^{-10} **nm** 10^{-9} 10^{-8} 10^{-7} **μm** 10^{-6} 10^{-5} 10^{-4} **mm** 10^{-3} **cm** 10^{-2} **dm** 10^{-1} **m** 10^0 **dam** 10^1 **hm** 10^2 **km** 10^3 10^4 10^5

WAVELENGTH (in nm)

FREQUENCY (in Hz or in s⁻¹)

10^{21} 10^{20} 10^{19} 10^{18} 10^{17} 10^{16} 10^{15} 10^{14} 10^{13} 10^{12} 10^{11} 10^{10} 10^9 10^8 10^7 10^6 10^5 10^4 10^3



Electromagnetic radiation that is part of the visible light spectrum.



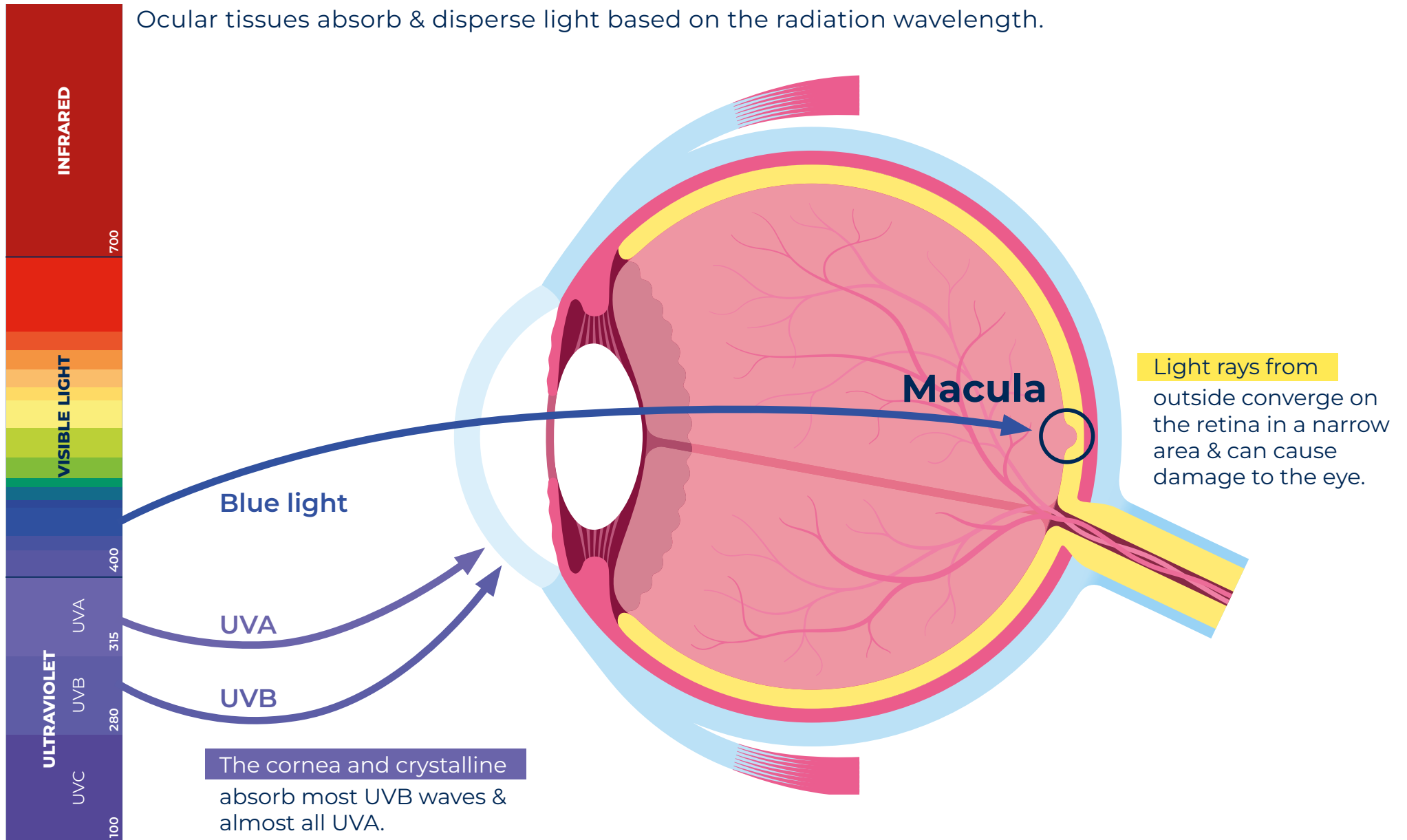
Shortest within the visible light spectrum but the highest light energy.

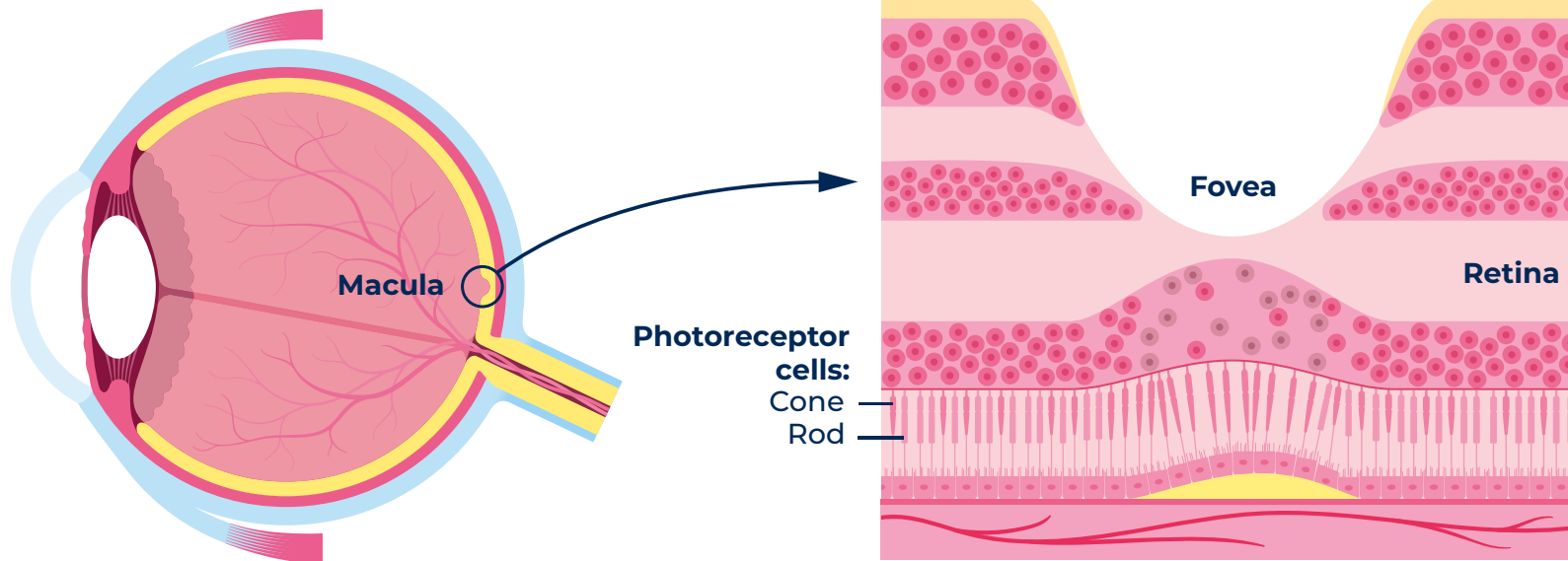


Emitted from sunlight & electronic devices.



Necessary for colour, high-contrast vision & essential for our well-being.



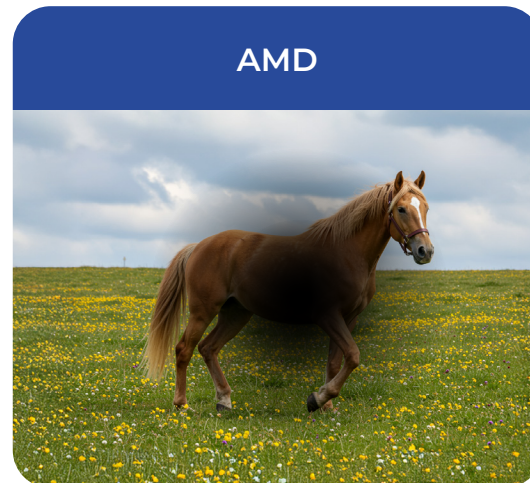
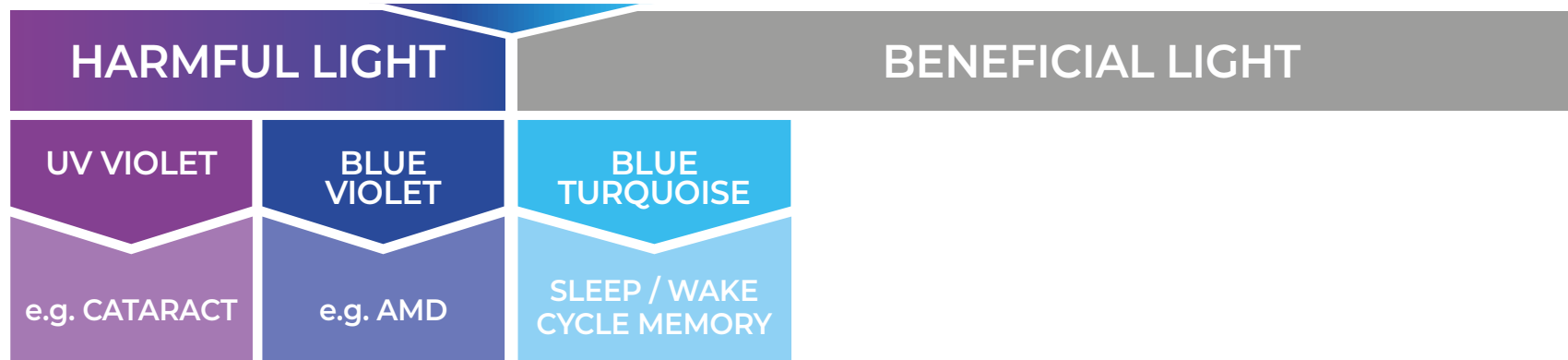
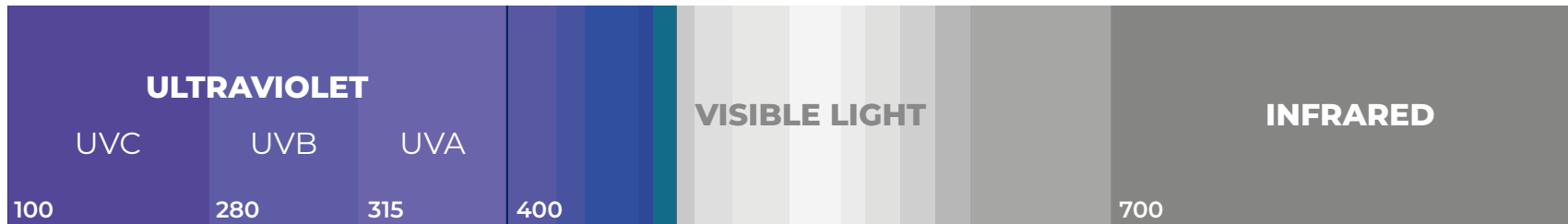


Macula is a specific, small area within the retina that's responsible for central vision & fine detail (think of the macula as the most important, high-resolution part of that film).

Retina is the light-sensitive tissue lining the back of the eye (think of the retina as the entire film of a camera).

Photodegradation is an autoxidation process, meaning that at **products generated by the absorption of light in turn cause a chain of oxidative reactions.**





TRADITIONAL METHODS



NEW METHOD



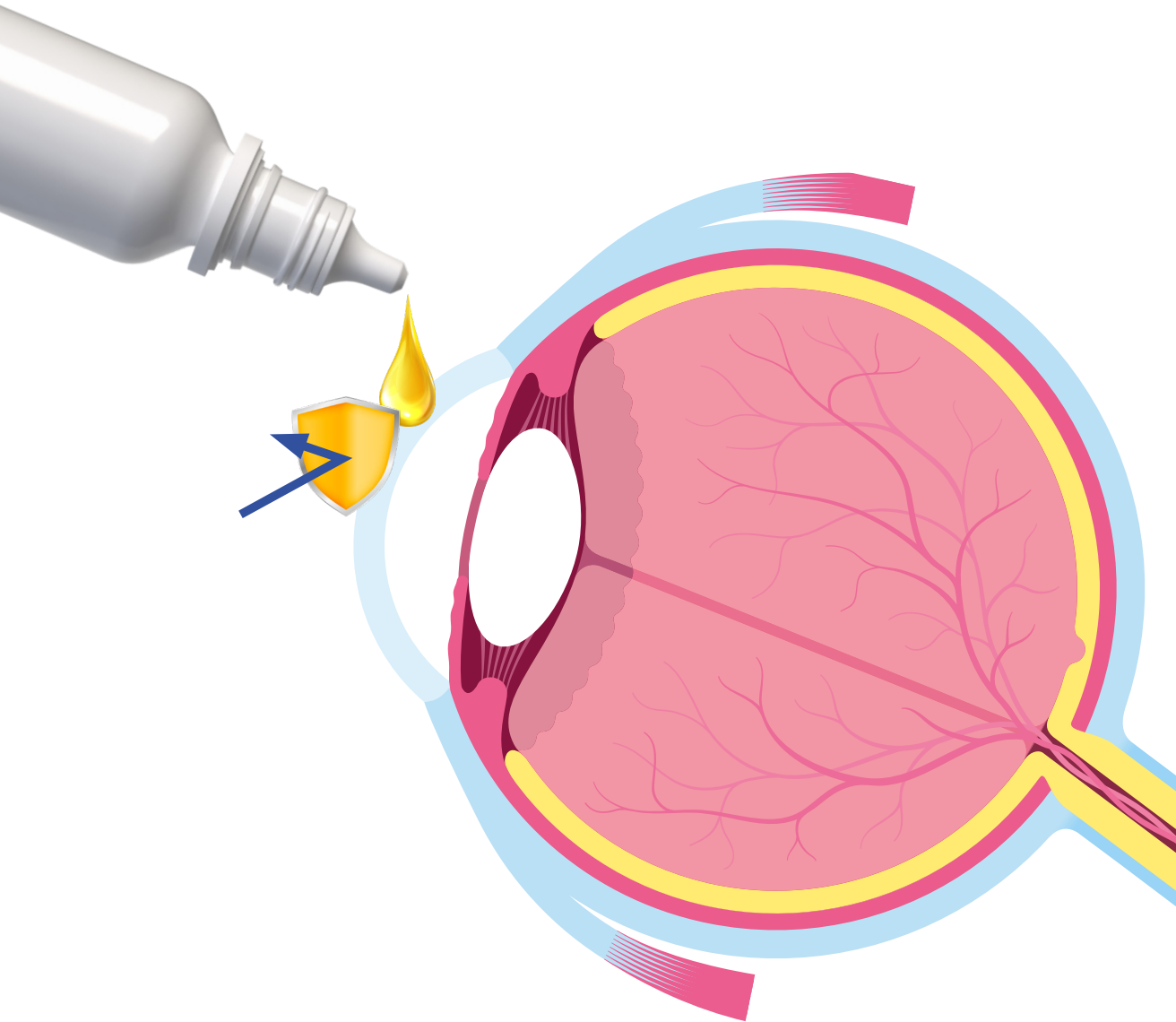


PHOTO PROTECTION

LUTEIN: antioxidant & radical scavenger

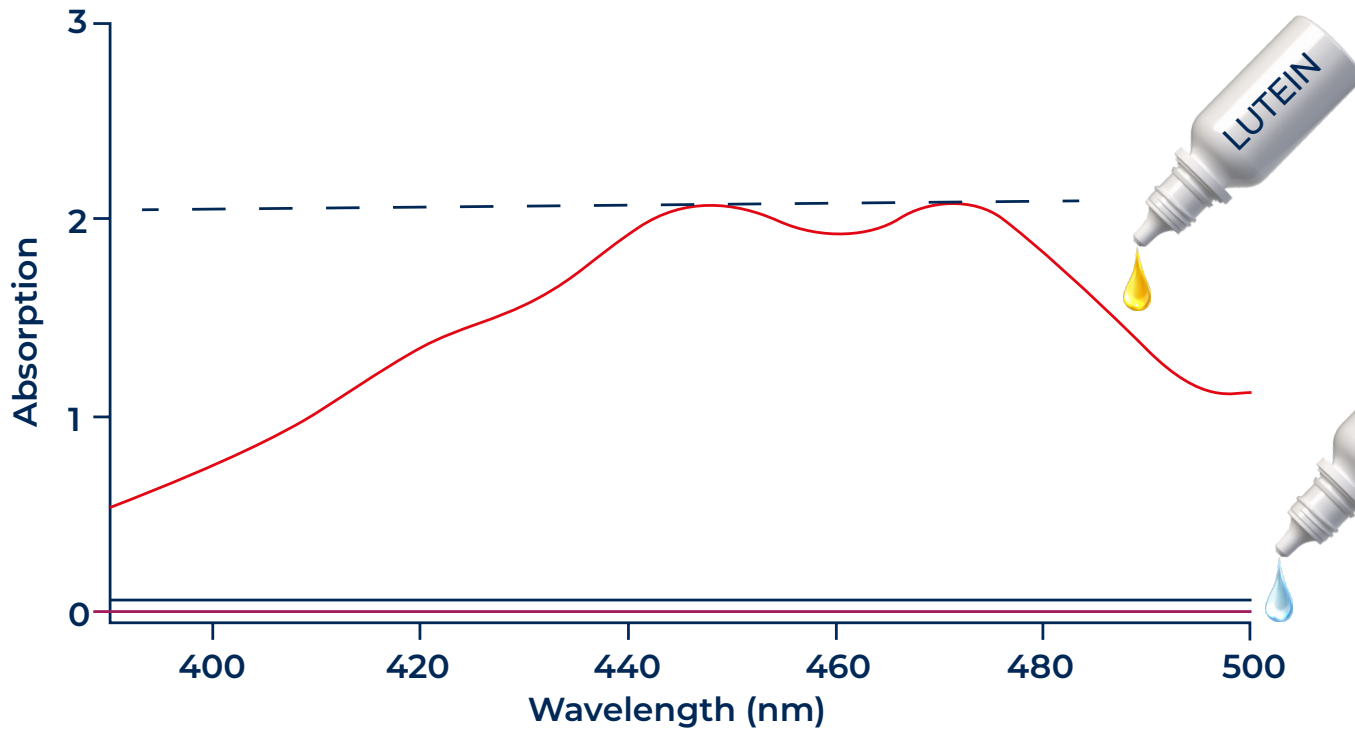
It is a yellow pigment that can absorb high-energy blue light & protect cells from phototoxicity.

The yellow colour of the macula, evident during the examination of the ocular fundus, is due to the presence of pigments that belong to the category of carotenoids, lutein & zeaxanthin. These elements protect the photoreceptors when capturing light, lessening its impact at the macular level.

Ability to
absorb light
& act as
filters



Antioxidant
activity of
carotenoids

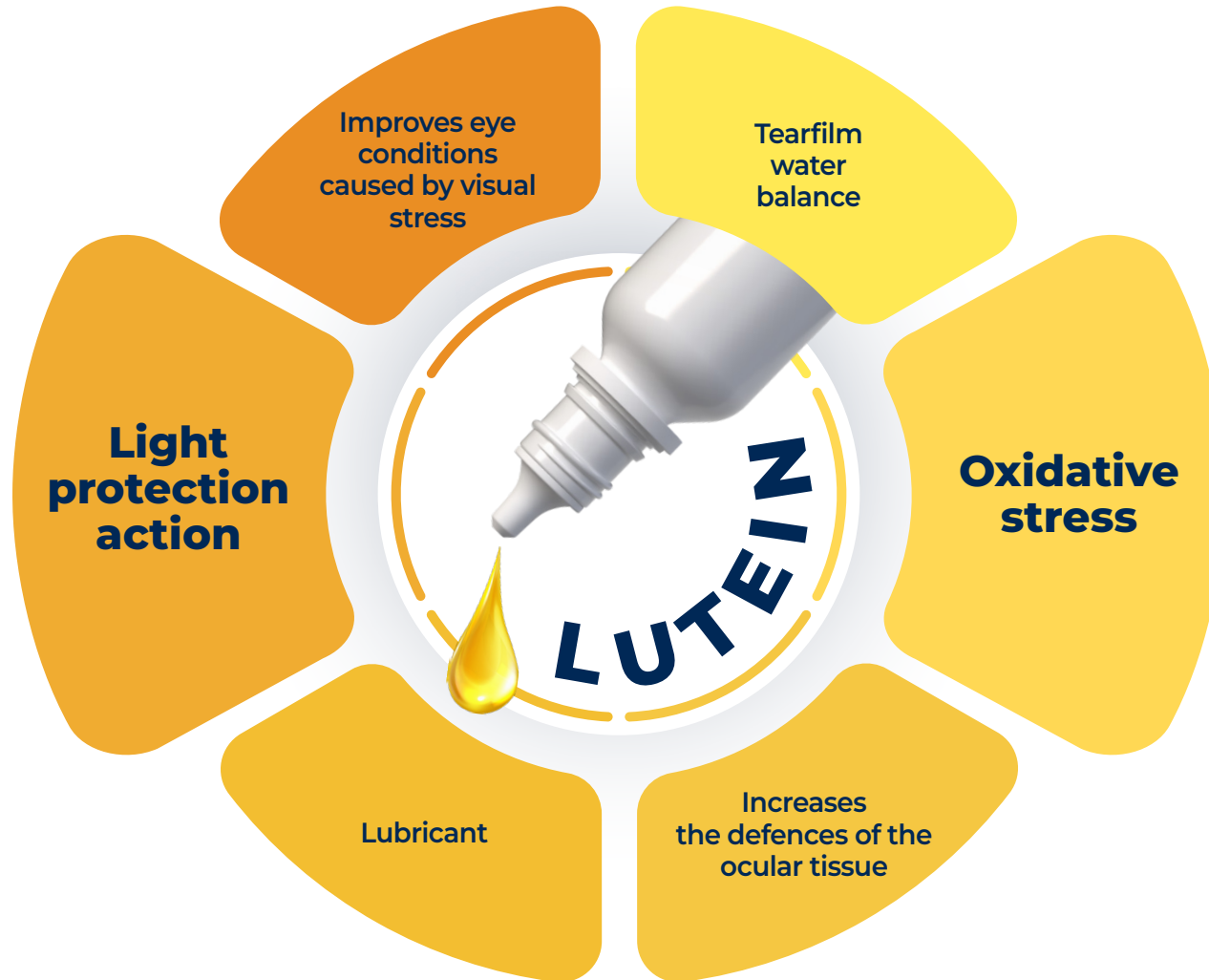


Red line: shows a high peak of light absorption in the spectral region between 390 and 450 nm.

The comparison solutions do not show absorption activity in the analysed spectrum.



Patented production technology which involves the formulation of a microemulsion where **Lutein** & **Vitamin E** constitute a **stable colloidal system** in particles of approximately 0.02 µm in size.



TECHNOLOGY
PATENTED FORMULATION
PATENT NO. 102021000006839
INTERNATIONAL PATENT PENDING PCT/IT2022/050064

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