



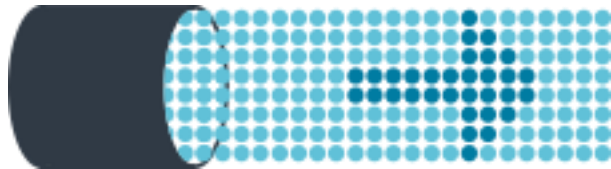
# HOW DOES THE SCANNER MEASURE CAROTENOIDS?



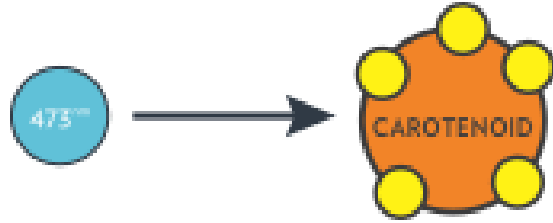
The Scanner technology works on the principle of light and the fundamental particle of light is a photon.



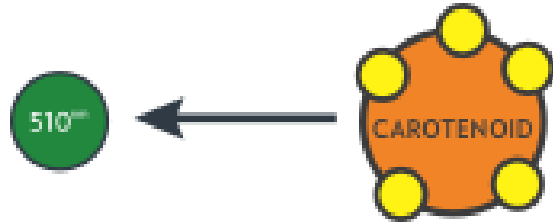
White light has photons of different wavelengths, which are represented by colors.



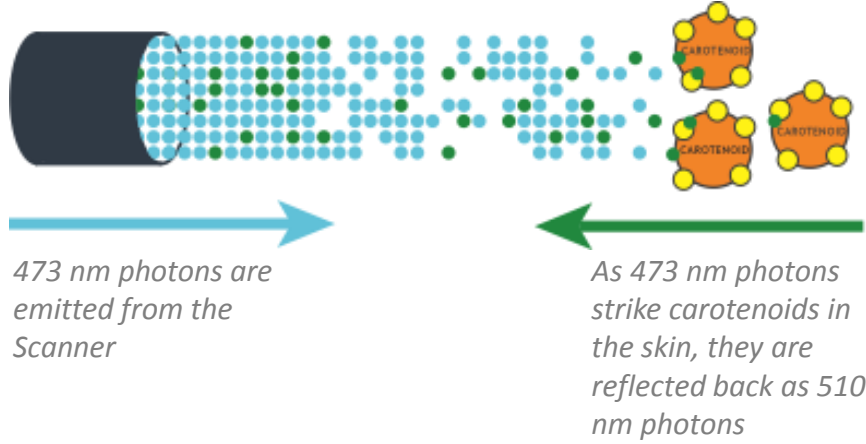
The Scanner produces a narrow beam of light in which all of the photons are the same of color-blue.



The blue light has a wavelength of 473 nanometres (nm).



When it comes into contact with a carotenoid molecular structure, the energy level of 473 nm photon becomes excited to 510 nm, the wavelength associated with green light.



Only the carotenoid molecule structure allows such color shift which is called the Raman shift. The green photons being proportional to the concentration of carotenoids in the skin are then counted to calculate the individual SCS.