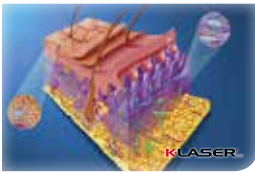
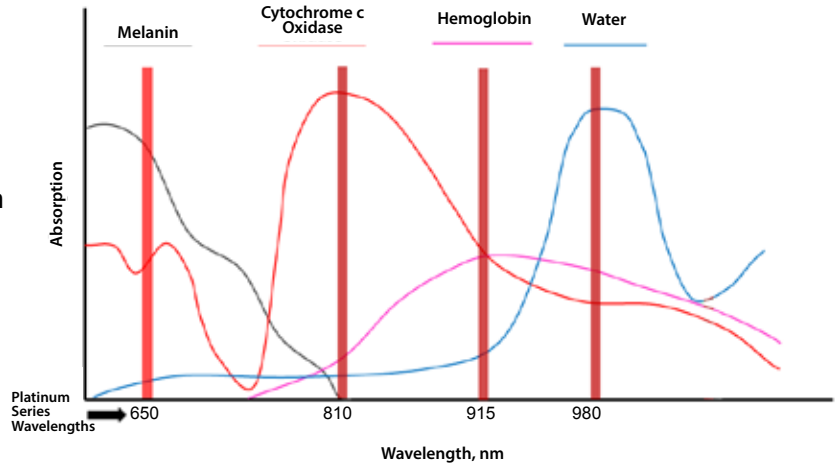


WAVELENGTHS

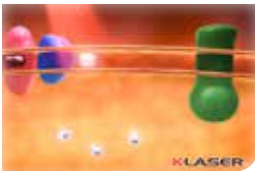
Why Are Wavelengths Important?

Wavelengths determine a therapeutic laser's depth of penetration in tissue and specifically target beneficial chromophores to stimulate the photochemical reaction.



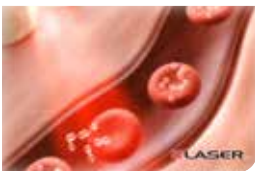
650nm Accelerates Surface Healing

Irradiating an area with 650nm, a wavelength where melanin in our skin absorbs very well, will ensure a large dose to the superficial region. Since light can both inhibit bacteria and promote cell growth, laser therapy has incredible results in wound healing and scar tissue regulation.



810nm Increases ATP Production

The enzyme determining how efficiently the cell converts molecular oxygen into ATP has the highest absorption at 810nm. Regardless of the enzyme's molecular state, when it absorbs a photon it will flip states. Photon absorption will accelerate the process and increase cellular ATP production.



915nm Enhances Oxygen Delivery

The quicker oxygen is released into the blood stream, the more fuel the cell has to carry out all of its natural healing processes. The peak of hemoglobin's absorption lies at 915nm, and when this radiation is absorbed, more of this oxygen-fuel is made available to the cells.



980nm Improves Circulation

Water in our pet's blood transports oxygen to the cells, carries waste away, and absorbs very well at 980nm. The energy created from absorbing a photon gets converted to heat, creating a temperature gradient at the cellular level, stimulating micro-circulation, and bringing more oxygen-fuel to the cells.