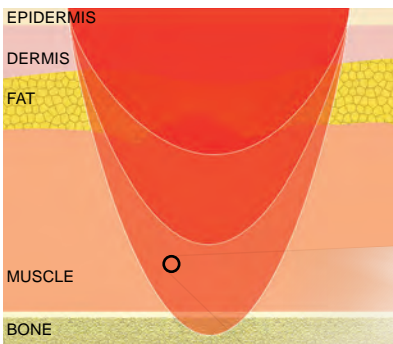


PHYSIOLOGICAL EFFECTS OF LASER THERAPY

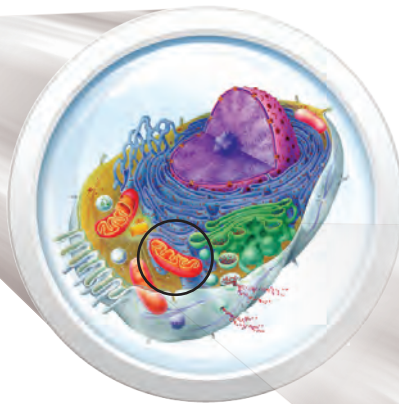
Laser Therapy is a non-invasive, pain-free, light-based therapy that uses red and infrared light to target inflamed, injured and diseased tissues. Photons of light stimulate ATP production, thereby accelerating the healing process. Compared to traditional treatment, patients recover from musculoskeletal and peripheral nerve injuries with less scar tissue formation, accelerated cell regeneration and improved function.

TISSUE PENETRATION

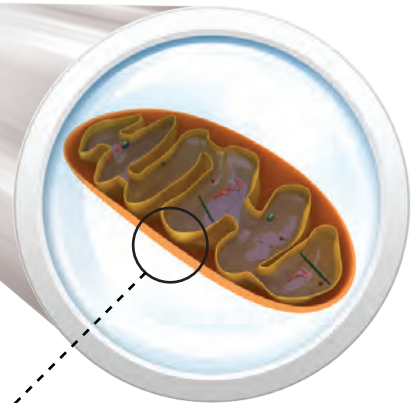


Photons of red and infrared light (600 – 900 nm) penetrate 5-10 cm deep into tissue and are absorbed by the mitochondria inside of cells

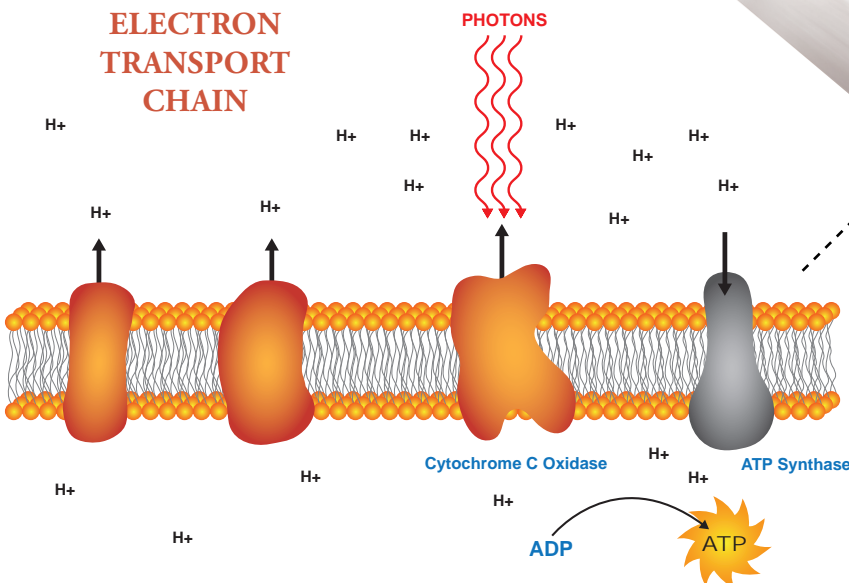
EUKARYOTE CELL



MITOCHONDRIA



ELECTRON TRANSPORT CHAIN



Cytochrome C Oxidase in damaged tissue absorbs these photons leading to increased ATP production



ATP plays a role in energy metabolism and intracellular signaling

CELL PROLIFERATION

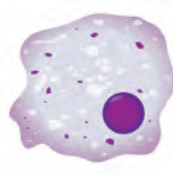
INFLAMMATORY MEDIATORS

FIBROBLASTS

OSTEOCYTES

MACROPHAGES

LYMPHOCYTES



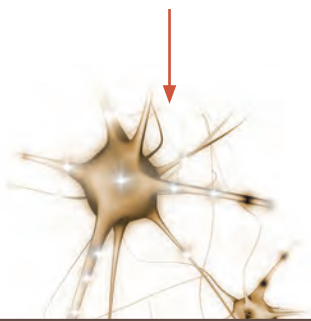
CHONDROCYTES

NEUTROPHILS



↑ Collagen, Cartilage and Bone Regeneration

↓ Inflammation and Edema



Tissue and Nerve Regeneration

Resolution of Inflammation and Pain