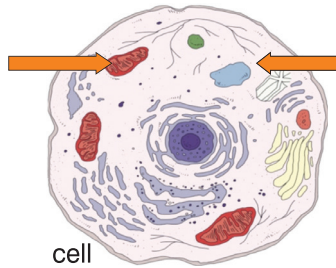


Laser Phototherapy

Cellular Mechanism of Action

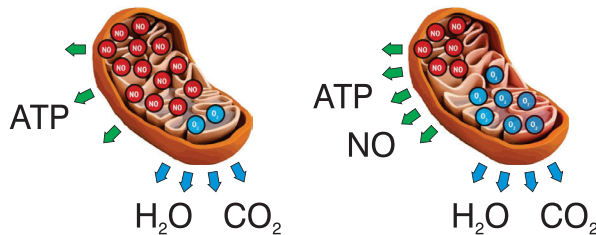
AVANT
Wellness

Mitochondrial Energy Production



Hormesis

- ↑ ATP / Cell Fuel
- ↑ Extracellular NO



- ↑ ROS Signalling
- ↑ Autophagy
- ↑ Unloaded Protein Response
- ↑ Heatshock Proteins

Nitrous oxide (NO) within the cell can bind with cytochrome c oxidase (CCO), thereby displacing oxygen and reducing mitochondrial respiration and thus reducing production of adenosine triphosphate (ATP).

When laser light is absorbed by CCO it prevents NO binding with CCO, resulting in more efficient use of oxygen and thus increasing production of ATP.

Instead of binding with CCO, excess NO is released from the cell.

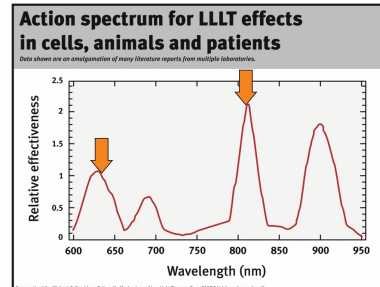
Hormesis is the process by which a transient metabolic stressor stimulates adaptations that improves health.

Retrograde signaling (ROS) is the process by which mitochondria signal the cell nucleus to express genes.

Laser light causes temporary mitochondria stress, resulting in temporary increase of ROS signaling. This increase in turn promotes low level inflammatory response, activating the cell's antioxidant defense systems.



The LZ30 produces laser light in the visible red (635nm) and near-infrared (808nm) spectrum at peaks in therapeutic efficacy. No other laser delivers as much power in the visible red spectrum.



LZ30 THERAPY LASERS

- ✓ Powerful
- ✓ Compact
- ✓ Cordless
- ✓ Versatile
- ✓ Affordable

AVANT
Wellness

INNOVATION
in PHOTOTHERAPY

Deborah Zolla

Director of Academic Support

(818) 575-6539 (EST)

deb.zolla@avantwellness.com

*** Ask about our graduate discounts ***