



Light therapy—or PBM (Photobiomodulation)—has some pretty amazing physiological benefits too!



The improvements in cellular function generated by these wavelengths—at about 630-670 nm and 830-850 nm—have been shown to provide a wide range of benefits:



IMPROVED SKIN HEALTH



ENHANCED MUSCLE RECOVERY



REDUCED JOINT PAIN



WEIGHT LOSS



MITOCHONDRIA: the “engine” of the cell.



Specific wavelengths of light have some amazing effects on the mitochondria in our cells, which are sometimes called the “engine” of the cell.

All living things need to make a certain kind of cellular energy called ADENOSINE TRIPHOSPHATE, or ATP.

Most of this activity occurs within the mitochondria, the “powerhouse” of the cell ATP and produced through cellular respiration

Light therapy is believed to help the most in the last step of cellular respiration: OXIDATIVE PHOSPHORYLATION.





NITRIC OXIDE

The "Miracle Molecule"



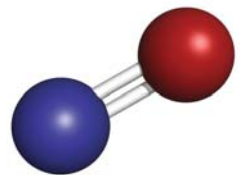
As we age (by the time we're 50-60 yrs old) we are (naturally) releasing only about 15-25% of the NO that we released when we were 20 years old.

This is significant because this UNRELEASED NO sits inside the mitochondria of over 250 different cell types in the body and prevents/reduces the production of ATP.

This "back up" of 75-85% of the cells in our body producing less or no ATP causes a reduction in collagen and elastin and ages our skin, but much more importantly produces FREE RADICALS, a leading cause of degenerative diseases, inflammation, etc.

Photobiomodulation reverses the whole degenerative process by:

- 1) Releasing the nitric oxide
- 2) Giving the cell the exact wavelengths of light which the cell converts to ATP, and
- 3) Stopping the process of creating free radicals.

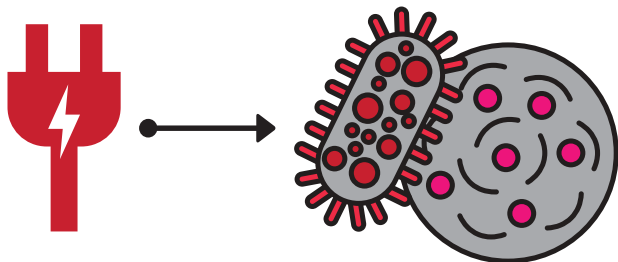




PBM literally feeds energy into our cells with photons from light, similar to natural sunlight.



This narrow band of wavelengths that can penetrate human tissue much more effectively, and scientists have discovered that some of these wavelengths have a unique ability to BOOST CELLULAR FUNCTION & ENERGY



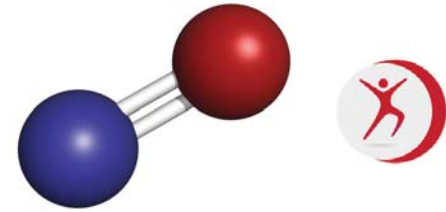
A simple way to think of this process is that the photons in these wavelengths essentially charge your "cellular batteries."





NITRIC OXIDE

The "Miracle Molecule"



CLINICAL STUDIES ON NO HAVE ALSO SHOWN TO BE RESPONSIBLE FOR:

- The reduction of heart attacks and strokes
- Increased blood flow to the brain (which has led some experts to believe it may also help to prevent Alzheimer's and dementia)
- Reduction of lactic acid build up in muscles, which gives athletes more stamina/strength and reduced recovery time
- Boost the immune system and to assist the immune system in fighting off bacteria, reducing inflammation and improving sleep quality.

NO has other benefits too numerous to mention here, but suffice it to say, it's easy to see why it was dubbed the "miracle molecule".