

Is More Power Better?

Power is Key

A common misconception within the laser community is that if low power is effective then more must be better, but that is simply not true. Low-level laser therapy (3LT®) works differently than the majority of high powered lasers on the market, it operates under the principles of a science known as photochemistry. In photochemistry, it is the unique characteristics of the photon (wavelength primarily) that are most important. The purpose of low-level laser therapy (3LT®) is to excite electrons in the photo-absorbing receptors, and excitation of electrons occurs via the absorption of a photon of a specific energy value. If too much energy is supplied, the electrons may not enter an excited state simply because the protein they are housed in may become altered due to the high amount of energy being applied to the cell. Proteins function properly only under optimal conditions (i.e. temperature and pH). We have recognized through numerous studies, that the wavelength is more important than the energy output, as too much energy can actually exacerbate the condition. Therefore, we have designed a unique, patent-protected delivery of photonic energy. By administering photons in a line generated beam we can maximize the photons being delivered to a targeted region of tissue ensuring proper electron excitation without producing a thermal event thus inhibiting our results.