At the cellular level, visible red and near infrared light (NIR) energy stimulates cells to generate more energy and undergo self-repair. This activity takes place within the mitochondria through an enzyme called cytochrome c oxidase. This enzyme accepts and converts photonic energy into cellular energy (ATP) and other gene transcription factors leading to repair and regeneration. [1]

The Vielight Advantage

The intranasal area is the most efficient channel to deliver photons to the ventral brain area. NIR photons penetrate easily through the porous bone structure, unlike natural barriers such as skin and hair. The ventral brain area holds important brain areas such as the hypothalamus, ventral prefrontal cortex and hippocampus. [2]

Vielight’s patented intranasal technology uses microchip LED technology to extract a high power density from an intranasal-sized diode.

Brain photobiomodulation

Neurons are cells that contain mitochondria. Based on the science of photobiomodulation, near infrared (NIR) light energy delivered to neuronal mitochondria triggers a cascade of beneficial cellular events. Some studied potential effects are: neuroprotection, activation of self-repair mechanisms and enhanced function.

Vielight’s patented intranasal stimulation technology and microchip LED technology are powerful tools for brain photobiomodulation.


**TECHNOLOGY**

**Neural Stimulation**

**VIELIGHT NEURO**  
\[ \alpha \] \[ \gamma \]  
[$1749]

The Vielight Neuro is the world's first transcranial / intranasal photobiomodulation (PBM) system. Designed primarily for brain photobiomodulation, it emits pulsed NIR light energy with advanced microchip LED technology for whole brain irradiation, specifically, of the Default Mode Network.

The Vielight Neuro has two versions: Alpha (α) and Gamma (γ).

<table>
<thead>
<tr>
<th>Version</th>
<th>Alpha (α)</th>
<th>Gamma (γ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse rate</td>
<td>10 Hz</td>
<td>40 Hz</td>
</tr>
<tr>
<td>Wavelength</td>
<td>810 nm</td>
<td>810 nm</td>
</tr>
<tr>
<td>Effects</td>
<td>overall brain function</td>
<td>specifically memory function</td>
</tr>
</tbody>
</table>

Each transcranial cluster contains a high-powered LED diode boosted by microchip technology.

The transcranial headset sends pulsed NIR photons through the cranium to the cerebral cortex.

The intranasal applicator sends pulsed NIR photons through the intranasal channel to the brain's ventral areas.

---

**Systemic Photobiomodulation**

**VIELIGHT**  
\[ 633 \] \[ 655 \]  
[$299 / $399]

The Vielight 633 Red and Vielight 655 Prime are intranasal devices designed to stimulate the circulatory, immune and endocrine systems. The red photons modulate these systems through the dense nasal capillary network.

<table>
<thead>
<tr>
<th>Version</th>
<th>633 Red</th>
<th>655 Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>633 nm</td>
<td>655 nm</td>
</tr>
<tr>
<td>Source</td>
<td>LED</td>
<td>Laser</td>
</tr>
</tbody>
</table>

---

**THE POCKET MIRACLE**  
[$349]

The Pocket Miracle combines four external applications of photobiomodulation: relieves pain, accelerates wound healing, rejuvenates skin and promotes hair growth.

---

**VIELIGHT 810**  
INTRANASAL DEVICE

The Vielight 810 is a standalone intranasal device. Its power output is approximately 1/2 of the Vielight Neuro.

Its gentler brain stimulation is intended for everyday use.

[ wavelength: 810 nm ]  
[$499]
Contact Us

Phone (North America) : 1 (808)280-7756
Email info@BiontologyArizona.com

WEBSITE: BiontologyArizona.com/VieLightNeruomodulator/

Contact us for information.