



Advanced Light Therapy





The Future of Light Therapy

"The day may not be far off when most homes will have a light source (most likely a LED device) to be used for aches, pains, cuts, bruises, joints, and which can also be applied to the hair and even transcranially to the brain".

Note: this is the closing comment from a collaborative study conducted by researchers at Boston's Mass General Hospital, the Harvard School of Medicine and the Harvard-MIT Division of Health & Sciences

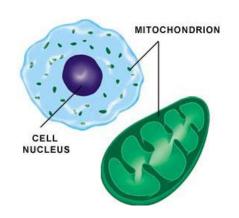
(Annals of Biomedical Engineering, Feb 2012. The Nuts & Bolts of Low Level Laser (Light) Therapy)

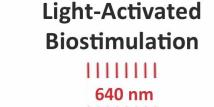


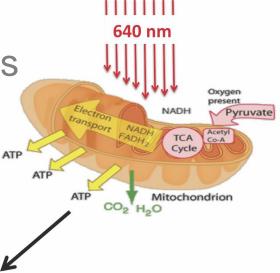


Think of it as a battery charger for compromised cells . . .

- Light source emits photons
- Photons are absorbed in the mitochondria and cell membranes
- Causing an elevation of ATP synthesis
- •Increased ATP causes a cascade of metabolic events resulting in biochemical & cellular changes...

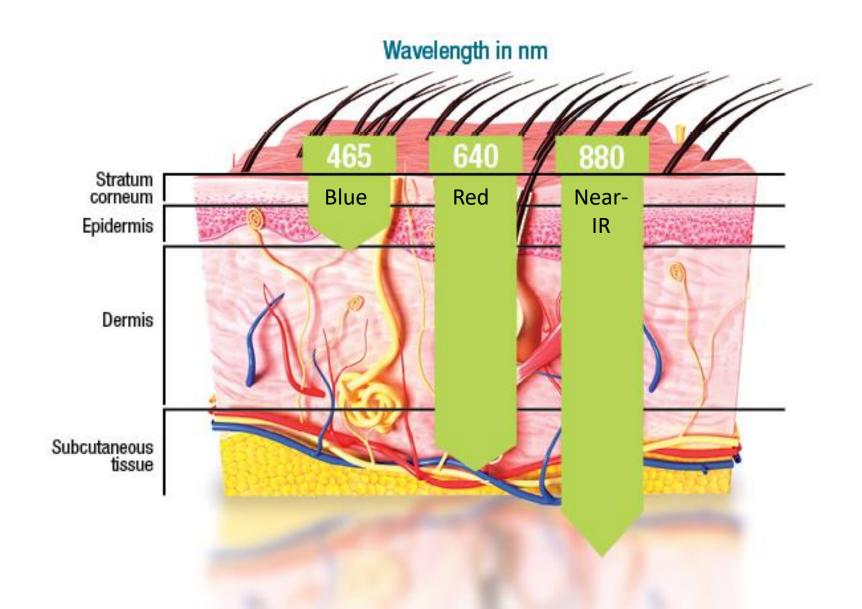








Depth of Penetration





Some Cells Affected by Light Therapy

- •<u>Fibroblast Cells</u>: (red, a little IR). Produces collagen and elastin fibers in connective tissue.
- •<u>Keratinocytes</u>: (both red and IR equally). Provides structural strength to the skin, hair and nails. Responsible for skin clarity, tone and texture.
- Mast Cells: (red, near IR). Essential for inflammatory reactions.
- •<u>Neutrophil Cells</u>: (leukocytes): (little red, mostly IR). Are the first line of defense in the inflammatory process. Adequate numbers are important to protect the body from infection.
- Macrophage Cells: (leukocytes): (red and IR). Play a vital role in activating specific immune responses.
- •P. acnes bacteria: (blue) causes bacteria to destroy itself.



Acne

Blue Light Dominant (465 nm)



Singlet oxygen is produced



P. acnes self-destruction
A phototoxic reaction
caused by singlet oxygen
(a bacteriacide)



Wrinkles

Red Light Dominant (640 nm)



Absorbed by fibroblasts



Up-regulation of ATP process





Collagenesis

Elastin production



Pain

Near-Infrared Dominant (880 nm)



Increases Microcirculation



Decrease Inflammation



Pain Reduction



Wound Healing

Red + IR wavelengths

(640 + 880nm)



Absorbed by epithelial cells



Up-regulation of ATP process – cell migration - angiogenesis





Wound closure



The Celluma Series

(Large Panels)



Celluma ELITE



Celluma SKIN



Celluma PRO/iPRO



Celluma SPORT



The Celluma Series (Smaller Panels)



Celluma RESTORE



Celluma LITE/iLITE



Celluma HOME



Celluma FACE



Celluma Clear



Celluma POD



Scalp Treatments +

Celluma RESTORE

- FDA-cleared
- Three-mode device
 - 1. HAIR reverse and prevent hair loss
 - 2. WRINKLES aging skin and fine lines
 - 3. PAIN arthritic, joint and muscle conditions









The Celluma Series (Full Body Panels)







Celluma DELUX

6LBS 57" X 24"

Celluma DELUX XL

9LBS 65" X 30"

- Same protocols as all 3-mode Celluma devices
- Space saving, hang on door when not in use
- Cost-effective alternative to an LED bed



Celluma Versatility











Celluma Versatility





Do not stand or place full-body weight on Celluma









Cosmetic Acupuncture







Before Celluma



After Celluma

2 times per week 8 weeks later No other modalities used





Before Celluma



After Celluma

2 times per week 5 weeks later No other modalities used







2 times per week for 8 weeks later
No other modalities used (images courtesy Laura Kitzman)





"Loving my Celluma and have been experimenting with different protocols. Protocol for this young acne client was 30 minute blue LED 1 x weekly with simple cleanse and extractions for 6 tx. Then 1 x month for 2 tx (NO enzyme or chemical peels) plus home care of salicylic wash, toner, 5% BPO gel, oil-free SPF a.m. and periodic clay mask. Client also cut sugar and dairy intake. We started Feb. 22nd but, due to my husband's illness, had only 1 appointment mid-May until our appointment last week (July 31st approx.) at which time the "after" photo was taken. These are excellent results given we did no full facials."

Images courtesy of Pamela Cantor's Correct Skin Therapy



Before Celluma



After Celluma

2 times per week 2 weeks later, no other modalities used



The Power of celluma LED Therapy!

Client is in her late 20's & struggling with adult acne. Here's How We're Fighting Back!

- ~ 30 minute Celluma Treatment, 2x / week using blue LED (It's so relaxing under the light, she can't wait to get in for her "nap time" now!)
 - ~ Gentle exfoliating facial 1x / month using an enzyme or a combo of lactic & salicylic acids. ~ I recommended a gentle cleanser that she was able to pick up at the drug store.
 - ~ She is using Circadia by Dr. Pugliese's Daytime Control & Nighttime Control which work to control sebum production, reduce inflammation, and eliminate the p. acne bacteria.

Immediately Before 1st Treatment...



Immediately After 9th Treatment...WOW!



Beach Bums Skincare & Waxing Salon ~ Stephanie Meyer, Owner / Esthetician 1542 Guava Avenue, Suite C, Melbourne, FL 32935 321-890-6010 ~ www.BeachBumsSkincare.com







Protocol: 3 times per week for 4 weeks
Photo taken 12 weeks <u>after</u> final Celluma treatment





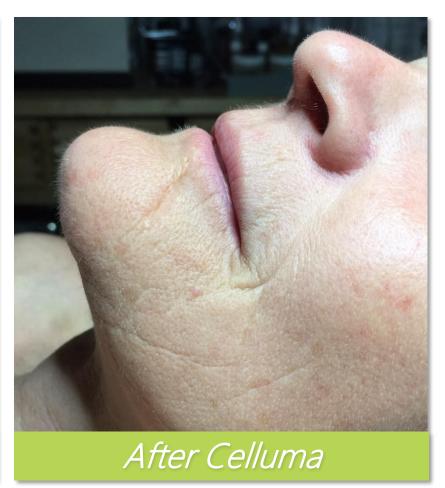
After Celluma

Protocol: 3 times per week for 4 weeks
Photo was taken 12 weeks <u>after</u> final Celluma treatment



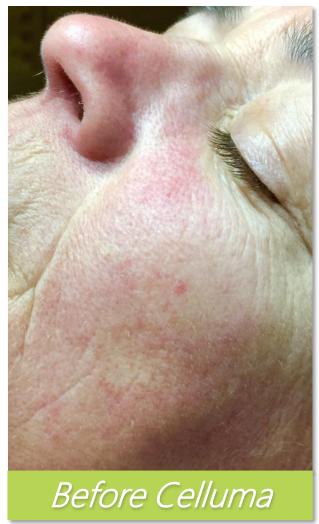


Before Celluma



1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
No other modality used (Images courtesy Lori Hall L.E.)







1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
No other modality used (Images courtesy Lori Hall L.E.)







1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
No other modality used (Images courtesy Lori Hall L.E.)



Firming Skin and Smoothing Wrinkles



4 week treatment - 8 weeks post treatment Image courtesy Lori Hall L.E.





Look at the improvement in texture & wrinkle depth!





Before Celluma



After Celluma

2 times a week for

4.5 weeks,

9 treatments total







Bruise after one 30 minute Celluma treatment
No other modality used

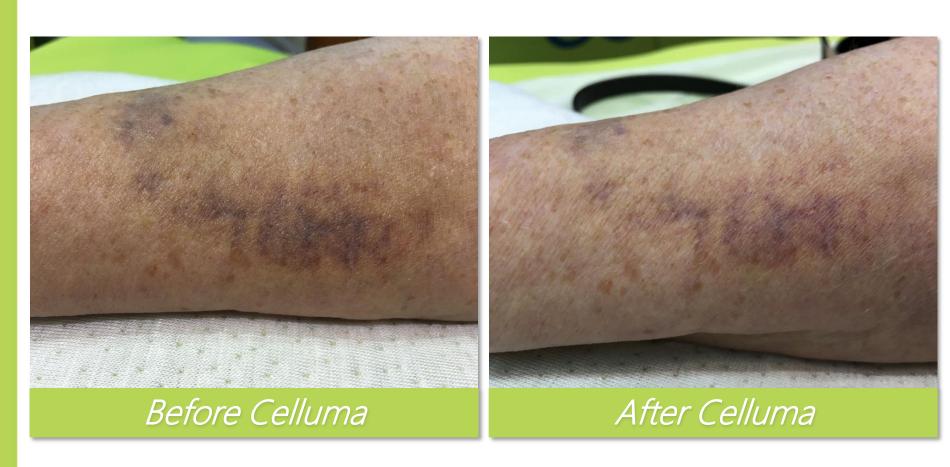






Bruise after one 30 minute Celluma treatment No other modality used





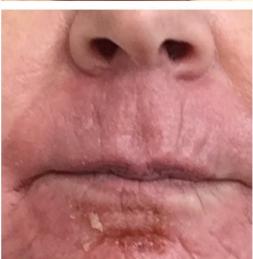
Arm bruise 20 hours after 1 Celluma treatment
No other modality used



Wound Healing*









"WOW! this machine is amazing. I had Deep Laser Resurfacing and started using the Celluma twice a day for 2 1/2 weeks. I started to see amazing results. For my 1 month check up, the doctor came in and said, "You look like should look at the 4 month mark." Thank you Celluma!

Cindy Tenbrook

* Celluma is not FDA-cleared for Dermal Wound Healing



Before & After Microneedling



After microneedling & before Celluma



Celluma



Before & After Microneedling



After microneedling & <u>before</u> Celluma



After 30 minutes Celluma



Before & After Microneedling



After microneedling & before Celluma



Celluma



Inflammation & Redness



Before Celluma



After 10 Days

1 x 30 minute daily Celluma treatment (on red) for 10 days
No other modality used. No antibiotics, steroids, medication or creams

(Images courtesy B. Burkiewicz



Corrective Skin Therapy



Used Celluma 2 times the first week

Client went on vacation the second week (no treatments)

Used Celluma 2 more times the 3rd week

Total 4 Celluma treatments



Images courtesy Jodi Holland
The Skin Trainer, Brockworth, Gloucester

NO OTHER
MODALITIES OR SKIN
CARE PRODUCTS USED



Dermal Wound Healing*





After 3 Celluma treatments over 9 days. No other modality used *Celluma is not FDA-cleared for wound healing



Celluma For Pets







Celluma in the News

Celluma in Collaboration with The Semper Fi Fund

We work with The Semper Fi Fund to make Celluma available to Wounded Warriors for pain relief



celluma **Light Therapy**

Celluma Awards





PA'S PUCT DUCT RODUCT RODUCT ODUCT















PRODUCTS





PROFESSIONALS







