Near infrared & red light therapy

Description

You can save this to a "Health" folder to help access.

Use this as a beginning to your own research and share with your doctor as appropriate. You can use drugs.com or other trusted health websites to look up the latest information on prescription drugs, herbs, foods or other treatments possible side & interaction effects.

Near infrared therapy (NIR)

Near infrared therapy bulbs around 810-830nm wavelength (look for NIR-A label) appear to increase ATP energy production in tissue- reducing inflammation, speeding up healing times of injuries, wounds, & sore muscles by penetrating up to 9 inches (23cm). A 150W NIR-A infrared bulb can be bought for \$10-\$21 & used with a clampable lamp to target healing anywhere on the body 12 inches away for 5 minute applications every 8 hours. More than every 8 hours or more than five minutes seems to lose effectiveiness. A cheap but effective substitute is a \$5 red coated 125 Watt bulb (Rural King's don't have a smelly coating) used for heating chickens/animals. 250 watt bulbs can burn upon just a moment's touch & are unsafe.

The bulb should be pointed at bare skin as it doesn't appear to work as effectively through clothing. Doing it more frequently than every eight hours or longer than five minutes may negate the benefits. Near infrared therapy has been used by doctors and trainers for years to increase metabolism, energy, circulation, mood, concentration, endurance, strength, recovery, flexibility and reduce eye injuries & diseases, body fat, inflammation, joint & muscle pain, anxiety, depression, ADHD, Alzheimer's & Parkinson's symptoms.

TBI, Alzheimer's, Parkinsons

NIR therapy appears to help grow new neurons, speed up energy production, & improve recovery symptoms in people with brain injuries or brain diseases and to speed up the brain. I've used it for 4-5 minutes on the front & back of the head simultaneously or one then the other if I have only one light. Then four hours later I do it on each side of the head, alternating every four hours. It speeds up my brain & feels great. I also need to sleep less than before

Brain Regeneration: Can Infrared Light Reverse Parkinson's and Alzheimer's?

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4550182/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5066074/

https://pubmed.ncbi.nlm.nih.gov/26347062/

Transcranial Near-Infrared Light May Treat Brain Injury and Neurodegeneration

Near-Infrared Light Regenerates Damage from Traumatic Brain Injury, Latest of Five Studies Show

Lasers Med Sci. 2016 Jul 1. [Epub ahead of print]

What is the best moment to apply phototherapy when associated to a strength training program? A randomized, double-blinded, placebo-controlled trial: Phototherapy in association to strength training.

Vanin AA et al.

Rojas JC, Gonzalez-Lima F. Low-level light therapy of the eye and brain. Eye and Brain. 2011;3:49–67.

J Clin Laser Med Surg. 2001 Dec;19(6):305-14.

Effect of NASA light-emitting diode irradiation on wound healing.

Whelan HT et al.

Ger Med Sci. 2006; 4: Doc05.

PMCID: PMC2703221

Influence of water-filtered infrared-A (wIRA) on reduction of local fat and body weight by physical exercise

Frank Möckel et al.

J Appl Physiol (1985). 2006 Jul;101(1):283-8. Epub 2006 Apr 20.

Effect of low-level laser (Ga-Al-As 655 nm) on skeletal muscle fatigue induced by electrical stimulation in rats.

Lopes-Martins RA, Marcos RL, Leonardo PS, Prianti AC Jr, Muscará MN, Aimbire F, Frigo L, Iversen VV, Bjordal JM.

ABOU-HALA, Andréia Zarzour et al. Effects of the infrared lamp illumination during the process of muscle fatigue in rats. Braz. arch. biol. technol. [online]. 2007, vol.50, n.3, pp.403-407. ISSN 1678-4324. http://dx.doi.org/10.1590/S1516-89132007000300006.

J Sports Med Phys Fitness. 2002 Dec;42(4):438-45.

Effect of linear polarized near-infrared light irradiation on flexibility of shoulder and ankle joints. Demura S, Yamaji S, Ikemoto Y.

http://articles.mercola.com/sites/articles/archive/2017/02/26/photobiomodulation.aspx

http://drlwilson.com/articles/SAUNALITE%20NIR%20BENEFITS.htm
THE BENEFITS OF NEAR INFRARED ENERGY by Dr. Lawrence Wilson May 2010
http://drlwilson.com/articles/sauna_therapy.htm

Alzheimer's & near infrared therapy

In one study five patients were given intranasal and transcranial infrared (810nm) light exposure pulsed at 10Hz. After 12 weeks of treatment with no side effects, they had increased function, better sleep, fewer angry outbursts, less anxiety, and less wandering as long as the therapy continued.

Saltmarche Anita E., Naeser Margaret A., Ho Kai Fai, Hamblin Michael R, and Lim Lew. Photomedicine and Laser Surgery. February 2017, ahead of print. doi:10.1089/pho.2016.4227. EFFECT OF 670-NM LIGHT-EMITTING DIODE LIGHTON NEURONAL CULTURES Margaret T.T. Wong-Riley _ and Harry T. Whelan 2 _ Department of Cell Biology, Neurobiology and Anatomy

2Department of Neurology,

Medical College of Wisconsin, Milwaukee, Wisconsin, USA https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20030001600.pdf Neuroreport. 2001 Oct 8;12(14):3033-7.

Light-emitting diode treatment reverses the effect of TTX on cytochrome oxidase in neurons. Wong-Riley MT, Bai X, Buchmann E, Whelan HT.

https://articles.mercola.com/sites/articles/archive/2017/11/12/photobiomodulation-light-therapy.aspx

Parkinson's & near infrared therapy

Multiple studies appear to show that near infrared light application may help reverse some of the neuronal death in Parkinson's. It has been used successfully to decrease anxiety, improve mood & concentration & to treat Alzheimer's as well.

"Near-IR light treatment modifies cellular function, promotes cell survival, and improves outcomes in laboratory and mouse models of Parkinson's disease"

SPIE Newsroom, 2008 Feb 24:2008:1-3.

Harnessing the cell's own ability to repair and prevent neurodegenerative disease.

Whelan H1, Desmet K, Buchmann E, Henry M, Wong-Riley M, Eells J, Verhoeve J.

"These results strongly suggest that LED treatment may be therapeutic to neurons damaged by neurotoxins linked to Parkinson's disease by energizing the cells and increasing their viability." Neuroscience. 2008 Jun 2; 153(4): 963-974.

doi: 10.1016/j.neuroscience.2008.03.042

NEAR-INFRARED LIGHT VIA LIGHT-EMITTING DIODE TREATMENT IS THERAPEUTIC AGAINST ROTENONE- AND MPP+-INDUCED NEUROTOXICITY Huan Ling Liang et al.

EFFECT OF 670-NM LIGHT-EMITTING DIODE LIGHT ON NEURONAL CULTURES

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https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20030001600.pdf

Neuroreport. 2001 Oct 8;12(14):3033-7.

Light-emitting diode treatment reverses the effect of TTX on cytochrome oxidase in neurons.

Wong-Riley MT, Bai X, Buchmann E, Whelan HT. fau

Infrared therapy and the skin

Infrared therapy used on the skin may help to treat skin conditions & rejuvinate damaged skin.

Rojas JC, Gonzalez-Lima F. Low-level light therapy of the eye and brain. Eye and Brain. 2011;3:49–67.

J Clin Laser Med Surg. 2001 Dec;19(6):305-14.

Infrared therapy & the eyes

The only effective treatment for one form of macular degeneration that brings back visionhttps://articles.mercola.com/sites/articles/archive/2017/11/12/photobiomodulation-light-therapy.aspx

The heat lamp may also warm the eye (closed) enough to help kill the bacteria/virus/fungal infection inside.

Avoid blue light (except first thing in morning to improve nightime sleep) to prevent eye damage https://articles.mercola.com/sites/articles/archive/2020/07/13/light-therapy-can-save-your-eyes.aspx

Prevention macular degeneration

https://articles.mercola.com/sites/articles/archive/2018/12/15/is-macular-degeneration-preventable.aspx

What is needed to not have to inject the drugs:

https://www.healthline.com/health/eye-health/wt-macular-degeneration-treatment-breakthroughs

Pharmaceutical grade DMSO may take antibiotics throughout the eye to help kill the infection and to prevent it from spreading to the brain. It may also take the anti-VEGF drugs that are normally injected and take them into the eye instead.

Rojas JC, Gonzalez-Lima F. Low-level light therapy of the eye and brain. Eye and Brain. 2011;3:49-67.

J Clin Laser Med Surg. 2001 Dec;19(6):305-14.

https://saunaspace.com/debunk-near-infrared-light-cataract-connection/

http://www.sciencealert.com/near-infrared-light-heals-eyes

Red light therapy

termark Red light therapy is at 670nm and also triples ATP production & speeds healing. It doesn't penetrate as far as NIR but is effective on tissue closer to the surface.

Category

1. Uncategorized

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