Microcurrent
Description
To Jesus:
You can save this to a "Health" folder for easy access later. Use this as a starting point for 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 & herbal drugs possible side & interaction effects. Typing in the name of two medications or a medication & an herb in a search bar of most browsers will bring up results with their interaction effects.
Microcurrent
Microcurrent & frequency specific microcurrent (FSM)
Microcurrent can increase ATP production & healing of injuries by 500%. Microcurrent devices can be almost imperceptible but

extremely effective for pain, inflammation & tissue healing (including bones).

Microcurrent may stop the pain permanently over 50% of the time & permanently improve another 30% of the time. For the times it doesn't permanently stop all pain, it can daily stop inflammation & pain for many with no observed side effects for most.

FSM is a brand that doctors & chiropractors can have that also have a lot of other frequencies for very specific treatment for different disorders.

my.clevelandclinic.org/health/treatments/15935-frequency-specific-microcurrent

Konstantinou E, Zagoriti Z, Pyriochou A, Poulas K. Microcurrent Stimulation Triggers MAPK Signaling and TGF-?1 Release in Fibroblast and Osteoblast-Like Cell Lines. Cells. 2020 Aug 19;9(9):1924. doi: 10.3390/cells9091924. PMID: 32825091; PMCID: PMC7564311.

ncbi.nlm.nih.gov/pmc/articles/PMC7564311/
Iijima H, Takahashi M. Microcurrent Therapy as a Therapeutic Modality for Musculoskeletal Pain: A Systematic Review Accelerating the Translation From Clinical Trials to Patient Care. Arch Rehabil Res Clin Transl. 2021 Jul 21;3(3):100145. doi: 10.1016/j.arrct.2021.100145. PMID: 34589695; PMCID: PMC8463469. ncbi.nlm.nih.gov/pmc/articles/PMC8463469/

verywellhealth.com/electrical-stimulation-for-faster-bone-healing-2549331

Griffin M, Bayat A. Electrical stimulation in bone healing: critical analysis by evaluating levels of evidence. Eplasty. 2011;11:e34. Epub 2011 Jul 26. PMID: 21847434; PMCID: PMC3145421. ncbi.nlm.nih.gov/pmc/articles/PMC3145421/

Facial microcurrent

Microcurrent for the face may be different than that used to heal tissues & reduce or eliminate inflammation & pain.

Microcurrent & exercise

Using microcurrent on the muscles after exercise appears to increase strength building, endurance, reduce/eliminate soreness & speed up recovery, & increase fat loss from the exercise. Microcurrent values of 0.3-25Hz & 100-500 µA appear to increase ATP (energy) production in cells by 300%-500%.

Kolimechkov S, Seijo M, Swaine I, Thirkell J, Colado JC, Naclerio F. Physiological effects of microcurrent and its application for maximising acute responses and chronic adaptations to exercise. Eur J Appl Physiol. 2023 Mar;123(3):451-465. doi: 10.1007/s00421-

022-05097-w. Epub 2022 Nov 18. PMID: 36399190; PMCID: PMC9941239. ncbi.nlm.nih.gov/pmc/articles/PMC9941239/

Microcurrent for eye diseases like wet & dry macular degeneration-

Chaikin L, Kashiwa K, Bennet M, Papastergiou G, Gregory W. Microcurrent stimulation in the treatment of dry and wet macular degeneration. Clin Ophthalmol. 2015 Dec 17;9:2345-53. doi: 10.2147/OPTH.S92296. PMID: 26719667; PMCID: PMC4689270. ncbi.nlm.nih.gov/pmc/articles/PMC4689270/ forbes.com/sites/iainmartin/2023/11/29/this-israeli-vc-claimed-the-crown-as-europes-best-investor/?sh=338569647709

store.naturaleyecare.com/microcurrent-stimulation-100ile-rentaloption.html

optimaleyeprogram.com/product-page/microstim-100i-le

"When in doubt, always check with a medical professional. Always work within the scope of practice.

Contraindications include:

- Pacemaker
- Pregnancy
- Irregular heartbeat
- Epilepsy

- Cancer or systemic disease
- Varicose veins (do not use microcurrent over the area)
- Phlebitis
- Open wounds

Conditions that may require clearance from a medical professional include diabetes, light sensitive migraines, metal pins or plates at the site of treatment, stroke, and Bells palsy.

Conditions that may interfere with or reduce the results include application of an incorrect conducting product. Use what is recommended by the manufacturer who has tested and calibrated their device to the conducting formula. Poor conducting gels will not send a correct signal to and from the epidermis. Oil-based products do not conduct. Dehydration, age, poor lifestyle (smoking, alcohol), inadequate nutrition, tanning beds, overexposure to ultraviolet light, poor sleep habits, certain medications, and a thyroid condition can also interfere."

Immediately above quoted from: dermascope.com/skin-care/11522-mastering-microcurrent-understanding-physiology-and-application-for-optimal-outcome

\dermascope.com/treatments/the-physiological-effects-of-microcurrent

my.clevelandclinic.org/health/treatments/15935-frequency-specific-microcurrent

lijima H, Takahashi M. Microcurrent Therapy as a Therapeutic Modality for Musculoskeletal Pain: A Systematic Review Accelerating the Translation From Clinical Trials to Patient Care. Arch Rehabil Res Clin Transl. 2021 Jul 21;3(3):100145. doi:

10.1016/j.arrct.2021.100145. PMID: 34589695; PMCID: PMC8463469. ncbi.nlm.nih.gov/pmc/articles/PMC8463469/

Microcurrent & infections

In a study of sinus pain & congestion, which is often a result of bacterial, fungal & or viral infections, using microcurrent from 5-20 min a day reduced pain & congestion both more than 40% over a four week period.

Goldsobel, A.B., Prabhakar, N. & Gurfein, B.T. Prospective trial examining safety and efficacy of microcurrent stimulation for the treatment of sinus pain and congestion. *Bioelectron Med* **5**, 18 (2019). doi.org/10.1186/s42234-019-0035-x bioelecmed.biomedcentral.com/articles/10.1186/s42234-019-0035-x

In another study of sinus pain, even just a five minute microcurrent treatment reduced sinus pain significantly over placebo.

Maul XA, Borchard NA, Hwang PH, Nayak JV. Microcurrent technology for rapid relief of sinus pain: a randomized, placebocontrolled, double-blinded clinical trial. Int Forum Allergy Rhinol. 2019 Apr;9(4):352-356. doi: 10.1002/alr.22280. Epub 2019 Jan 22. PMID: 30667597; PMCID: PMC6590214. ncbi.nlm.nih.gov/pmc/articles/PMC6590214/

Microcurrent & pressure ulcers

Microcurrent used for 10 hours a day reduced pressure ulcers over 25 days.

Avendaño-Coy J, Martín-Espinosa NM, Ladriñán-Maestro A, Gómez-Soriano J, Suárez-Miranda MI, López-Muñoz P. Effectiveness of Microcurrent Therapy for Treating Pressure Ulcers in Older People: A Double-Blind, Controlled, Randomized Clinical Trial. Int J Environ Res Public Health. 2022 Aug 15;19(16):10045. doi: 10.3390/ijerph191610045. PMID: 36011679; PMCID: PMC9408011.

Microcurrent & post-op infection

After knee replacement surgery, over 8 days of microcurrent significantly reduced post-op infections in a study.

Chow J. Wireless Microcurrent-Generating Antimicrobial Wound Dressing in Primary Total Knee Arthroplasty: A Single-Center Experience. Orthop Rev (Pavia). 2016 Jun 27;8(2):6296. doi: 10.4081/or.2016.6296. PMID: 27433298; PMCID: PMC4933816. ncbi.nlm.nih.gov/pmc/articles/PMC4933816/

Microcurrent helps stop bacterial infections

ncbi.nlm.nih.gov/pmc/articles/PMC9408011/

Kasturi Ganesh Barki, Amitava Das, Sriteja Dixith, Piya Das Ghatak, Shomita Mathew-Steiner, Elizabeth Schwab, Savita Khanna, Daniel J. Wozniak, Sashwati Roy, Chandan K. Sen. Electric Field Based Dressing Disrupts Mixed-Species Bacterial Biofilm Infection and Restores Functional Wound Healing. *Annals of Surgery*, 2019; 269 (4): 756 DOI:

40.4007/SLA.0000000000002504

10.1097/SLA.0000000000002504

Indiana University. "Electric field-based dressing helps heal wound infections." ScienceDaily. ScienceDaily, 17 May 2019.

sciencedaily.com/releases/2019/05/190517173456.htm Microcurrent helps wound healing, bacterial infections, bone breaks, tendons, eye diseases, cancer acupuncturetoday.com/article/32547-the-magic-of-microcurrent

Devices

One of the best settings for general healing, inflammation & pain may be betweem 0.3hz-25Hz and 100-500 milliamps.

Micro II Microcurrent \$28 needs 9V battery, has continous setting so with a 9v lithium rechargeable (usb-c charging most convenient) can be set & stay on for 2 days instead of needing resetting every hour.

InTENSity Micro Combo TENS & Microcurrent Combination Unit for \$50 that requires a 9v battery

InTENSity Select Combo TENS, EMS, IF, & Microcurrent Unit for \$90 requires a battery

Neo Ultima having microcurrent, TENS, inferential & muscle stimulation for \$80 & has an internal lithium rechargeable battery

The Avazzia microcurrent devices claim to treat many kinds of acute & chronic disease & injuries with devices from \$600 to \$5000.

thesanashop.com/collections/microcurrent-therapy

The MicroStim 100i Le reports it deploys the frequencies used in studies of treating macular degeneration with microcurrent, \$1200 microstim.com/product/microstim-100i-le/



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Category

1. Uncategorized

Date Created November 2023 Author biggs