

## Red Light Therapy for Knee and Osteoarthritis

Many studies have been conducted specifically on red light therapy and knee osteoarthritis. More are coming out all the time. In 2018, two separate Brazilian studies concluded that red light therapy plus exercise or stretching was significantly more effective at treating osteo-related knee pain than just stretching or exercise alone [2,3] Researchers of one study concluded patient's knees "showed reduced pain and increased physical functionality after 3 months of stretching plus [red light] therapy." [3]

**Osteoarthritis Knee Pain:** Since 2015, a chorus of other studies in major journals have found that natural red light therapy significantly reduces knee pain from osteoarthritis. [4,5,6]

**Increased Range of Motion:** Recent research on knee pain builds on previous research showing red light therapy not only decreases knee pain, but also increases functionality and range of motion. [7,8]

**Cartilage Regeneration:** A 2017 study in *Lasers in Medical Science* assessed knee cartilage in animal studies and found red light very significantly reduced pain and improved knee cartilage regeneration through "biochemical changes." In other words, it addressed root causes, not just numbed symptoms. [9]

**Treating Meniscus Tears:** European researchers conducted a double-blind, placebo-controlled trial in 2013 on pain levels in patients with meniscal pathology (meniscus tears). They concluded: "Treatment with light therapy was associated with a significant decrease of symptoms compared to the placebo group: it should be considered in patients with meniscal tears who do not wish to undergo surgery." [10]

**General Knee Pain:** Red light therapy can improve general joint problems that are unrelated to arthritis as well. A systematic review in *The Australian Journal of Physiotherapy* looked at 11 clinical trials of light therapy for chronic joint disorders in the knee. Across all of these studies, light therapy reduced pain while improving overall joint function. [11]

## Red Light Therapy for Hand and Wrist Pain

**Hand Osteoarthritis in Women:** A 2015 systematic review in *Lasers in Medical Science* found that red light therapy plus ultrasound showed strong results for treating hand osteoarthritis in women, with a major decline in pain. This meta-analysis also documented extensive, positive results for the use of light therapy for arthritis in the knees, neck, back, jaw, and other areas. [12]

**Bouchard's & Heberden's Nodes in the Hand:** A 2016 German study published in *Lasers in Surgical Medicine* analyzed red light therapy's effect on the hands of 34 people with the bony outgrowth and swelling conditions known as Bouchard's nodes & Heberden's nodes. Researchers found light therapy "significantly reduced pain & ring size and increased range of motion" and that "the effects were very large." [13]

## Red Light Therapy for Spine Pain

Recent research is also showing potential to treat spinal joint pain from conditions like Ankylosing spondylitis. A 2016 European study concluded that the combination of red light therapy and stretching exercises decreased spinal pain more effectively than just placebo therapy with stretching in patients with Ankylosing spondylitis. [14]

## Emerging Research Shows Light Therapy Can Treat Root Causes of Arthritis

Conventional medicine manages arthritis symptoms, but doesn't offer a cure. Emerging laboratory research in 2018 is showing that red light therapy has the potential to treat arthritis at a cellular level and address the root causes.

Photomedicine researchers in Brazil published a study in late 2018 showing that red light therapy decreased all cytokine levels after therapy and increased immune cell populations in mammals. Researchers concluded: "Our results indicate that light therapy could change the inflammatory course of arthritis, tending to accelerate its resolution through immune cells photobiostimulation." [15]

## Decades of Positive Research on Red Light Therapy and Arthritis

There have been numerous positive red light therapy and arthritis studies in recent years, building on a base of positive findings from prior decades to make up a huge base of evidence in favor of the therapy as a safe and effective treatment for arthritis pain.

A systematic review in *The Journal of Rheumatology* found significant results across thirteen randomized controlled arthritis trials that had been conducted prior to the year 2000:

**Rheumatoid Arthritis:** The best results were demonstrated in people suffering from rheumatoid arthritis, with light therapy reducing participants' pain by 70 percent compared to the placebo.

**Morning Stiffness:** Red light therapy reduced morning stiffness in participants by 27.5 minutes, and significantly increased hand flexibility. [16]

## Health and Fitness Leaders Trust Light for Joint Pain and Inflammation

In addition to the huge base of clinical research, there are the health & fitness leaders using Light for joint pain and inflammation today and seeing incredible results.

**Dr. Sarah Ballantyne**, aka Paleo Mom, [has spoken](#) about how 3 months of using a full-body

Light every day made her joint pain mostly disappear, for the first time in many years. She called it a major a life-changer. Results have been similar for people [treating hormone-related challenges with red light therapy](#). You can see more [natural health experts who use Contour Light here](#).

## **Bottom Line: Red Light Therapy is a Compelling Natural Treatment for Arthritis and Joint Pain**

Clinical research from around the world has shown red light therapy has a significant positive effect on arthritis, joint pain, inflammation, and related symptoms. Scientific Sources and Medical References:

[1] What Is Arthritis? Arthritis Foundation.

[2] de Paula Gomes CAF, et al. Incorporation of photobiomodulation therapy into a therapeutic exercise program for knee osteoarthritis: A placebo-controlled, randomized, clinical trial. 2018 Oct;50(8):819-828.

[3] Paolillo FR, et al. Ultrasound plus low-level laser therapy for knee osteoarthritis rehabilitation: a randomized, placebo-controlled trial. Rheumatology International. 2018 May;38(5):785-793.

[4] Angelova A, Ilieva EM, et al. Effectiveness of High Intensity Laser Therapy for Reduction of Pain in Knee Osteoarthritis. Pain Research and Management. 2016;2016:9163618.

[5] Fukuda VO, et al. Short-Term Efficacy of Low-Level Laser Therapy in Patients with Knee Osteoarthritis: A Randomized Placebo-Controlled, Double-Blind Clinical Trial. 2015 Dec 6;46(5):526-33.

[6] Alayat MS, Aly TH, et al. Efficacy of pulsed Nd:YAG laser in the treatment of patients with knee osteoarthritis: a randomized controlled trial. Lasers in Medical Science. 2017 Apr;32(3):503-511.

[7] Alfredo PP, Bjordal JM, et al. Efficacy of low level laser therapy associated with exercises in knee osteoarthritis: a randomized double-blind study. Clinical Rehabilitation. Jun 2012; 26(6): 523-33.

[8] Bjordal JM, et al. A systematic review of low level laser therapy with location-specific doses for pain from chronic joint disorders. Australian Journal of Physiotherapy. 2003;49(2):107-16.

[9] S GN, et al. Radiological and biochemical effects (CTX-II, MMP-3, 8, and 13) of low-level laser therapy (LLLT) in chronic osteoarthritis in Al-Kharj, Saudi Arabia. Lasers in Medical Science. 2017 Feb;32(2):297-303.

- [10] Malliaropoulos N, et al. Low-level laser therapy in meniscal pathology: a double-blinded placebo-controlled trial. *Lasers in Medical Science*. 2013 Jul;28(4):1183-8.
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- [12] Paolillo AR, Paolillo FR, et al. Synergic effects of ultrasound and laser on the pain relief in women with hand osteoarthritis. *Lasers in Medical Science*. Jan 2015; 30(1): 279-86.
- [13] Baltzer AW, Ostapczuk MS, Stosch D. Positive effects of low level laser therapy (LLLT) on Bouchard's and Heberden's osteoarthritis. *Lasers in Surgical Medicine*. 2016 Jul; 48(5):498-504.
- [14] Stasinopoulos D, et al. LLLT for the management of patients with ankylosing spondylitis. *Lasers in Medical Science*. 2016 Apr;31(3):459-69.
- [15] Dos Anjos LMJ et al. Modulation of immune response to induced-arthritis by low-level laser therapy. *Journal of Biophotonics*. 2018 Sept 11:e201800120.
- [16] Brosseau L, Welch V, et al. Low level laser therapy for osteoarthritis and rheumatoid arthritis: a meta-analysis. *The Journal of Rheumatology*. Aug 2000; 27(8): 1961-9.