

# Topically-Applied Celadrin Provides Arthritis Relief within 30 Minutes

Osteoarthritis (OA) is a progressive, degenerative joint disease estimated to affect more than 27 million individuals in the United States.<sup>1</sup> The most common symptoms are pain, stiffness, reduced joint range of motion, and limitations to normal activities that are a part of daily living, such as getting up from a chair, walking, balance, and ascending/descending stairs.<sup>2</sup>

Because of the debilitating effects of OA, there is a need for alternative treatments that benefit individuals with OA without the harmful side effects of synthetic drugs. One such arthritis drug, recently withdrawn from the market, is reported to have caused 55,000 deaths.<sup>3</sup> This points out the importance of finding safe, effective natural treatments that will enable osteoarthritis sufferers to exercise and increase their strength and conditioning.

An exciting new all-natural product, Celadrin, has been designed to provide safe, fast-acting joint and muscle pain relief. Celadrin is a complex of special cetylated, esterified fatty acids (cetyl myristoleate, cetyl myristate, cetyl palmitoleate, cetyl laurate, cetyl palmitate, and cetyl oleate). In other words, Celadrin is a mixture of fatty acids that have been stabilized by attaching natural cetyl alcohol. Celadrin has been shown to quickly reduce pain and inflammation with no side effects, as demonstrated in clinical trials published in internationally acclaimed medical journals.<sup>4</sup>

## 100% of Knee OA Patients Received Benefit

In a double blind study conducted at the University of Connecticut, **40 patients with osteoarthritis of the knees** were randomly assigned to receive either [Celadrin cream](#) or a placebo. Patients were tested on three occasions: (1) baseline, (2) 30 minutes after initial treatment, and (3) after 30-day treatment of cream application twice per day. Assessments included knee range of motion, timed

“up-and-go” from a chair and stair climbing, and two other functional tests. For stair climbing ability and the up-and-go test, significant decreases in time were observed 30 minutes after the first administration and after one month of use only in the Celadrin group. Furthermore, range of motion of the knees increased with Celadrin both 30 minutes after the initial application and after one month’s use. **One hundred percent of the osteoarthritic subjects on Celadrin showed significant improvement in just 30 minutes** and cumulative benefits throughout the remaining 30 days of the study. In contrast, no difference was observed in the placebo group.<sup>4</sup>

## Other Studies Support Celadrin’s Effectiveness

In a more recent study, Dr. William J. Kraemer’s team enrolled 28 patients: 10 with knee osteoarthritis, 10 with wrist osteoarthritis, and eight with elbow osteoarthritis. Each patient applied the Celadrin cream with menthol to the affected area twice a day for a week. Participants underwent testing before and after treatment. In individuals with knee OA, significant improvements in stair-climbing ability (about 12%), “up-and-go” performance (about 12%), balance and strength (about 16.5%), and range of motion (about 3.5%) were observed, as were reductions in pain. In individuals with severe pain of the elbow and wrist, significant improvements in dynamic (about 22 and 24.5%, respectively) and isometric (about 33 and 42%, respectively) local muscular endurance were observed, as was a reduction in pain.<sup>5</sup>

A further 30-day study by Dr. Kraemer’s team examined the effects of Celadrin cream on static postural stability and plantar pressures in patients with osteoarthritis (OA) of one or both knees in 40 human subjects.<sup>6</sup> “Postural stability” refers to one’s ability to move and then maintain a remarkable

variety of postures, without falling. Severe pain, articular damage and quadriceps muscle weakness associated with OA of the knee contribute to postural instability via loss of motor control. Measurements of “plantar pressure” assess foot and ankle functions during gait and other functional activities.

The results of this study showed that **30 days of treatment with Celadrin cream significantly improved standing postural stability in patients with knee OA.** The greater postural stability observed in patients with OA was considered the **result of pain relief.** The authors of this study concluded that Celadrin cream may help improve the exercise trainability of people with osteoarthritis.<sup>6</sup>

The clinical efficacy of Celadrin has been published in such esteemed journals as the *Journal of Rheumatology* and the *Journal of Strength Conditioning and Research*. It has been shown that **Celadrin reduces joint and muscular discomfort within 30 minutes of topical application.**<sup>2,4,5,6</sup>

Individuals with **psoriasis** experienced measurable improvement from using topically-applied Celadrin during a small, preliminary, double-blind, placebo-controlled study. Evaluation of symptoms included skin scales, patchiness, raised skin, redness, dryness and cracks. Each participant was evaluated at 7 and 14 days. Measurable improvement was noted in all symptoms.<sup>7</sup>

## How Does Celadrin Work?

In 2008, Dr. Robert Hesslink presented basic research showing that Celadrin works by interacting with membrane receptors involved with the inflammatory cascade. The results of Dr. Hesslink’s studies were described to a group of scientists and industry leaders at the Nutrigenomics meeting in Paris. Dr. Hesslink’s presentation included studies conducted by a leading international clinical discovery organization for the pharmaceutical and biotechnology industries, in which **Celadrin was shown to inhibit thromboxane, a compound that strongly promotes inflammation and local tissue damage** through a variety of mechanisms.<sup>8</sup>

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Simply put, Celadrin decreases inflammation and helps lubricate cell membranes throughout the body, restoring fluids that cushion bones and joints to promote flexibility and mobility. Over time, because of the reduction of inflammation delivered by using Celadrin, the joints and surrounding tissue have an opportunity to promote healing.

Celadrin works similar to, but much more dramatically than, the essential fatty acids EPA and DHA from fish oils. Celadrin’s complex blend of esterified fatty acids provides many vital and beneficial effects for the inflammatory responses in the body. Celadrin induces changes at the cellular level, within the cell membranes, which positively affect the cell membranes’ responsiveness. This aids in the reduction of cartilage breakdown in the joints.

## References:

1. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States. Part II, Lawrence RC, Felson DT, Helmick CG, Arnold LM, Choi H, Deyo RA, Gabriel S, Hirsch R, Hochberg MC, Hunder GG, Jordan JM, Katz JN, Kremers HM, Wolfe F, *Arthritis Rheum*, 58(1):26-35, Jan 2008.
2. A cetylated fatty acid topical cream with menthol reduces pain and improves functional performance in individuals with arthritis, Kraemer WJ, Ratamess NA, Maresh CM, Anderson JA, Volek JS, Tiberio DP, Joyce ME, Messinger BN, French DN, Sharman MJ, Rubin MR, Gómez AL, Silvestre R, Hesslink RL Jr, *J Strength Cond Res*, May 2005.
3. Testimony of David J. Graham, MD, MPH, November 18, 2004 before Senate Finance Committee, <http://www.senate.gov/~finance/hearings/testimony/2004test/111804dgtest.pdf>
4. Effect of a cetylated fatty acid topical cream on functional mobility and quality of life of patients with osteoarthritis, Kraemer WJ, Ratamess NA, Anderson JM, Maresh CM, Tiberio DP, Joyce ME, Messinger BN, French DN, Rubin MR, Gómez AL, Volek JS, Hesslink R Jr, *J Rheumatol*, 31(4):767-74, Apr 2004.
5. A cetylated fatty acid topical cream with menthol reduces pain and improves functional performance in individuals with arthritis, Kraemer WJ, Ratamess NA, Maresh CM, Anderson JA, Volek JS, Tiberio DP, Joyce ME, Messinger BN, French DN, Sharman MJ, Rubin MR, Gómez AL, Silvestre R, Hesslink RL Jr, *J Strength Cond Res*, 19(2):475-80, May 2005.
6. Effects of treatment with a cetylated fatty acid topical cream on static postural stability and plantar pressure distribution in patients with knee osteoarthritis, Kraemer WJ, Ratamess NA, Maresh CM, Anderson JA, Tiberio DP, Joyce ME, Messinger BN, French DN, Sharman MJ, Rubin MR, Gómez AL, Volek JS, Silvestre R, Hesslink RL Jr, *J Strength Cond Res*, 19(1):115-21, Feb 2005.
7. A Preliminary Study for the Use of Celadrin for the Treatment of Psoriasis, Third party pilot trial performed by Life Management Group, September 2002.
8. The Cellular Basis for the Efficacy of Celadrin in the Treatment of Joint Pain and Discomfort, Hesslink R., Sc.D., NutriGenomics, Paris, France, March 14, 2008.

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