

The Celadrin[®] Family

Celadrin • Celadrin Cream Celadrin Complex with Glucosamine

Celadrin Complex with Glucosamine 90 tablets

Ingredients per tablet:

Glucosamine Sulfate KCI.......500 mg Celadrin500 mg

(a proprietary blend of esterified fatty acid carbons (EFAC) of myristate, myristoleate, laurate, oleate, palmitate, and palmi toleate with tapioca)

Other ingredients: Cellulose, croscarmellose sodium, silicon dioxide. Suggested Adult Use: One tablet three times daily. Take with or without food.

Celadrin®

500 mg, 90 capsules

Ingredients per capsule:

Celadrin...... 500 mg

(a proprietary blend of esterified fatty acid carbons (EFAC) of myristate, myristoleate, laurate, oleate, palmitate, and palmitoleate with tapioca)

Other ingredients: Gelatin (capsule)

Suggested Use: One capsule 3 times daily, with or without food.

Celadrin®

350 mg, 90 SoftGels

Ingredients per 3 softgels:

Celadrin...... 1050 mg

(a proprietary blend of esterified fatty acid carbons (EFAC) of myristate, myristoleate, laurate, oleate, palmitate, and palmitoleate with tapioca)

Other ingredients: soft capsule (gelatin, glycerin, carob), soy oil, salmon oil.

Suggested Use: Take 3 softgel capsules daily, with or without food.

Celadrin Cream

Drug Facts

Active IngredientsMenthol (1.25%)
PurposeTopical Analgesic

Other ingredients:

Deionized Water, Celadrin(Proprietary Blend (blend of esterified fatty acid carbons (EFAC) including Cetyl Myristate, Cetyl Myristoleate, Cetyl Oleate, Cetyl Palmitoleate, Cetyl Laurate), Benzyl Alcohol, Glycerin, Glyceryl Stearate, Mentha Piperita (Peppermint Oil), Olea Europaea (Olive) Fruit Oil, PEG 100 Stearate, Cetyl Alcohol, Phenoxyethanol, Chlorphenesin, Benzoic Acid, Butylene Glycol, Sorbic Acid, Cetearyl Alcohol, Carbomer, Alpha Tocopherol Acetate (Vitamin E),

Lecithin, Potassium Hydroxide. This product is free of parabens.

Suggested use: Apply to the affected area no more than 3 to 4 times daily.

Indications: For temporary relief of minor aches and pains associated with simple backache, joint pain, strains, bruises and sprains.

Benefits

Increased Range of Motion in Joints*

Research has shown that Celadrin can have an impact on improving the range of motion in joints. A placebo-controlled trial conducted in 2002 showed that those individuals taking a complex containing Celadrin for 2 months had a significant improvement in knee flexion (ability to bend the knee) over those taking a placebo.

Another study conducted on Celadrin published in 2004 concluded that treatment "significantly increased physical performance (as measured by a variety of orthopedic tests)" in patients with compromised knee mobility. The study found that the subjects given Celadrin showed improvement in their ability to climb stairs, rise from a chair and walk, along with an improved sense of balance, strength and endurance.³

Helps Maintain Healthy Joint Cartilage*

Glucosamine sulfate plays a fundamental role as a building block for joint cartilage. Evidence to date suggests it may reduce the severity of the symptoms in individuals with joint problems. 45

Glucosamine sulfate has been shown in some studies to stimulate the regeneration of damaged cartilage, while also having anti-inflammatory effects. Research has found that glucosamine sulfate may have a stimulatory effect on proteoglycan production from human cartilage cells. ⁶

A specific 3-year placebo-controlled, randomized study was conducted to assess the impact of taking oral glucosamine sulfate on the progression of joint space narrowing.

Joint space narrowing may be associated with certain degenerative conditions of articular tissue. The study found that those individuals taking the oral glucosamine at the recommended intake had no space narrowing on average over the time period versus significant space narrowing in the placebo group. Glucosamine sulfate may further play a role in enhancing joint lubrication by acting to form the protective agent mucin, a necessary component of healthy joints.





The Celadrin® Family

Maintains Joint Comfort*

The anti-inflammatory actions of Celadrin have been demonstrated by one double-blind, placebo controlled trial that showed Celadrin, when taken orally at recommended intake levels, decreased pain scores and increased walking distance compared to the group receiving placebo. The authors theorize that Celadrin may work by down-regulating the effect of certain precursors of the body's inflammatory response.

In one large open trial, over 1200 people took oral glucosamine sulfate for periods ranging from 36 to 64 days. Over 250 physicians participated in this multicenter study. Ninety-five percent of the subjects experienced greater joint comfort and increased mobility. The physicians reported "good" results in 59%, and "sufficient" results in 36%. The improvements lasted for up to three months after the glucosamine sulfate was discontinued. 8

Benefits of Topical Celadrin Cream

Celadrin Cream can also be an effective option for topical joint pain relief. Celadrin fatty acid esters combined with 1.25% USP grade natural menthol provides minor pain relief for sore muscles and joints and the surrounding areas. When applied topically, Celadrin is well-absorbed and can act locally to help maintain joint comfort and increase the range of motion of joints.

Studies have confirmed the benefits of topical applications of the cream directly to sore joints. In a double-blind placebo-controlled trial published in the Journal of Rheumatology in 2004, forty individuals with sore knee joints participated. Twenty patients were given Celadrin Cream and 20 others were assigned a placebo cream to be applied topically twice daily for 30 days. Participants were assessed on various orthopedic measures of improvement. At the end of the study, the researchers noted that the Celadrin Cream was an effective treatment for improving knee ROM, ability to ascend/descend stairs, ability to rise from sitting, walk and sit down, and unilateral balance. No changes were seen in the placebo group.⁹

A second study was conducted by the same group of researchers using a cream consisting of Celadrin and menthol. In this trial, participants who had significant functional performance deficiencies of elbow, knee or wrist joints were given the cream and asked to apply it twice daily for one week.

Measure of comfort and performance were assessed before the treatment and again after one week. The researchers found significant improvement with the use of the cream. Overall, there was a significant improvement in joint range of motion, comfort levels, muscular endurance and joint function. Even in the relatively short period of this trial (only 1 week), the cream was deemed to be effective for enhancing joint function in these participants.¹⁰

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

References

Hesslink R Jr., et al. Cetylated fatty acids improve knee function in patients with osteoarthri-

tis. J Rheumatology 2002;8:1708-1712.

2. Anonymous. Monograph: Glucosamine sulfate. Alt Med Review 1999:4:3:193-195

3. Kraemer WJ, et al. Effect of a cetylated fatty acid topical cream on functional mobility and quality of life of patients with osteoarthritis.

J Rheumatology 2004;4:767-74.

4. Crolle G, D'Este E. Glucosamine sulphate for the management of arthrosis: a controlled clinical evaluation. Curr Med Res Opin 1980;7:104-109.

5. Rovati LC. Clinical research in osteoarthritis: design and results of short-term and long-term trials with disease modifying drugs. Int

J Tissue React 1992;14:243-51.

6. Bassleer C, et al. Stimulation of proteoglycan production by glucosamine sulfate in chondrocytes isolated from human osteoarthritic articular cartilage in vitro. Osteoarthritis and Cartilage 1998;6:427-434.

7. Reginster JY, et al. Long-term effects of glucosamine sulphate on osteoarthritis progression: a randomized, placebo-controlled clinical trial. Lancet 2001; 357:251-56.

8. Macario , J.T., Rivera, I.C. Bignamini, A.A. Oral glucosamine sulphate in the management of arthrosis: report on a multi-centre open investigation in Portugal. Pharmatherpeutica 1982; 3(3):157-68.

9. Kraemer WJ, et al. Effect of a cetylated fatty acid topical cream on functional mobility and quality of life of patients with osteoarthritis.

J Rheumatol. 2004 Apr;31(4):767-74.

10. Kraemer WJ, et al. A cetylated fatty acid topical cream with menthol reduces pain and improves functional performance in individuals with arthritis. J Strength Cond Res. 2005 May;19(2):475-80.

Celadrin® is a proprietary blend of esterified fatty acids that have been shown to benefit joint function and flexibility.* Being a complex molecule consisting of various fatty acids, it is able to penetrate cell membranes, enhancing membrane permeability and cell-to-cell signaling.*

Supports joint function and mobility*

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Distributed by: **Doctor's Best, Inc.**1120 Calle Cordillera, Suite 101, San Clemente, CA 92673
(800) 777-2474
www.drbvitamins.com

Science-Based Nutrition™ **Dietary** Supplement Celadrin® **SUPPORTS JOINT FUNCTION & MOBILITY***

500 mg/90 Capsules

Supplement Facts

Serving Size 1 capsule Servings per container 90 servings

Amount per serving % Daily Value

Celadrin® [a proprietary blend of 500 mg esterified fatty acid carbons (EFAC) of myristate, myristolcate, laurate, oleate, palmitate, and palmitoleate with tapiocal

† Daily Value not established.

Other ingredients: Gelatin (capsule).

Suggested Adult Use: One capsule three times daily, with or without food.

CONTAINS NOTHING OTHER THAN LISTED INGREDIENTS.

