

Agel FLX

Agel™ FLX was formulated to take advantage of 4 fantastic ingredients that have all been found to be very beneficial in the maintenance of healthy joints and maximum flexibility. This formulation is a first, not only because it contains all 4 ingredients, but also because it is delivered in a gel suspension, a remarkable innovation by itself.

Joint pain and immobility associated with osteoarthritis are a problem that is increasing around the world. Tens of millions of people in the United States alone are forced to limit their activity and therefore have a hindered lifestyle as a result of poor joint health. As our population continues to age, this problem will continue to increase and therefore, so will the need to alleviate the cause and the symptoms of this painful and debilitating condition.

Osteoarthritis is the term used to describe joints that have deteriorated and become inflamed as a result of damaged cartilage. The cartilage serves as the cushion at the joint surface, and when it is damaged and worn, it becomes roughened and patchy, sometimes to the point of bone-on-bone friction. These roughened surfaces cause inflammation, subsequent pain, and a decreased range of motion of the joints. Osteoarthritis has many causes, many of them relating to extended use and abuse over the course of many years. In fact, practically everybody has, or will experience some degree of osteoarthritis at some point in their life. But, there are some physical conditions and other predisposing factors that accelerate this process including the following: obesity, poor nutrition, genetics, traumatic injury, and overuse. In fact, some people even develop some degree of joint pain and degeneration by their teenage years.

So, what are the answers to this complex problem? There are many medications available today that address only the symptoms of osteoarthritis. Most of them are known as NSAID's or Non-steroidal Anti-inflammatory Drugs. These are more commonly known by the names of Ibuprofen, Naproxen, and Aspirin. There are also some other even more potent medications available, but a physician must prescribe them. Although frequently effective at alleviating the symptoms of osteoarthritis, the NSAID's all have significant ill-health-related consequences with long-term use. In addition, they don't address the underlying problem, that being the worn cartilage and damage to the joint itself. In fact, some studies show that these medications accelerate the progression of osteoarthritis.

As a result of the limitations related to the currently available medications for osteoarthritis, there has been significant research done to identify other means of addressing this condition, and better yet of preventing the premature deterioration of the joint cartilage itself. As this research has progressed, there have been some rather remarkable discoveries. Researchers have identified some of the key building blocks in our joints and cartilage and have found naturally occurring sources of them in our environment. By studying the effects of incorporating these components into our diets, scientists have found some wonderful results with regard to the improvement of joint health, and even the slowing of joint degeneration. They have concluded that by orally ingesting some of these compounds that are important factors in the regeneration and maintenance of healthy joints, we can delay the process and even improve the symptoms of osteoarthritis. That is remarkable.

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So, what are these compounds that have been found to be so helpful in maintaining healthy joints? There are four that we will address here: (a) Chondroitin, Glucosamine, MSM (MethylSulfonylMethane), and Celadrin proprietary combination of cetylated fatty acids). These four ingredients have all been found in clinical trials, individually, to improve joint function and health. They have become a mainstay and a very important ally to those who suffer from joint pain and immobility. What's more, they have been found to slow down the process of joint deterioration, and are fast becoming a mainstay for all adults who want to maintain healthy joints and active lifestyles.

Wouldn't it be great if there were a product available that had all 4 of these ingredients in one formulation? What kind of synergy would be present if all 4 of these natural joint health wonders were able to perform together in a single blend?

Agel FLX Benefits

Chondroitin is extracted from shark or bovine cartilage. It is one of the major building blocks used in the formation and repair of the cartilage matrix. Cartilage is the tough, flexible connective tissue that serves as the cushion for the joints and is also found in other parts of the body such as the tip of the nose and outer ears. One of chondroitin's primary functions as one of the key components in the cartilage matrix is to attract water to the other larger macromolecules within the matrix, thus keeping it soft and flexible. As such, it helps provide the cushion necessary to prevent bone-to-bone contact, especially in the weight bearing joints such as the knees and hips. In addition, the body uses chondroitin to prevent certain enzymes from breaking down the existing cartilage, thus providing a protective effect. The optimum daily dose is 1200 mg.

Glucosamine is produced from crab, lobster and shrimp shells. It is classified as an amino sugar. Unlike other forms of sugar found in the body, this form is incorporated into the structure of body tissues, rather than being used for energy. In fact, the body uses glucosamine to build your fingernails and toenails, tendons, skin, eyes, bones, ligaments and even your heart valves. But, in particular, it is found in high concentrations in your joint tissues and more specifically the cartilage matrix. Glucosamine is one of the components used in the production of Chondroitin, and in fact, it stimulates the body to produce more of this important building block for joint cartilage. As we age, our bodies decrease the natural production of Glucosamine therefore supplementation of this important joint structural component is important. The optimal daily dose is 1500 mg.

In multiple clinical trials, Glucosamine and Chondroitin have been found to work synergistically to help reduce joint degeneration and may in fact help to stimulate the regeneration of damaged cartilage.

MSM (MethylSulfonylMethane) is a naturally occurring organic sulfur compound found in many plant and animal tissues. Sulfur is an essential component of healthy hair, skin, nails, tendons, and joints. It has also been found to help detoxify the body on a cellular level, in addition to relieving pain and inflammation. MSM provides the essential sulfur

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that is necessary to build strong collagen and therefore strong and healthy cartilage by strengthening the sulfur bonds between the collagen strands. Although MSM is found in many of the foods that we eat, processing and cooking easily destroy it. As a result, MSM is probably not present in significant quantities in the majority of foods that we eat. Most people would probably benefit from supplementation of this crucial element for optimal health.

Celadrin® is a patented blend of cetylated fatty acids (CFA's) that have been stabilized through a proprietary process of esterifying oils. This blend has been formulated to optimize the natural ability of CFA's to alleviate pain and reduce inflammation in human tissues. In addition, the CFA's in Celadrin® have the effect of increased joint lubrication. The prime role of Celadrin® appears to be its ability to enhance cell membrane health and integrity. As a result it halts the production of inflammatory compounds known as prostaglandins. It also reduces the production of the negative immune factors like IL-6 that also play a central role in inflammation.

The body is made up of an enormous number of cells separated into various types and functions. The cell membrane is the organized structure that separates and protects components in the cell from neighboring cells and the outside world. Some of the major components of the cell membrane are structural lipids, which regulate nutrients and other compounds across the cell membrane. This regulation is very critical to the adequate function and health of the individual cell.

Celadrin® enhances the cell membrane and its integrity for efficient functionality. The result is a more efficient, fluid, permeable and a youthful cell membrane. Loss of cell membrane integrity from internal and external stressors begins a number of rapid aging processes – including uncontrolled or imbalanced inflammation. Inflammation can occur with age, dietary conditions, free radicals, stress or other insults which stimulate or stiffen cell membranes. This could lead to one or more forms of joint inflammation. **Celadrin®** not only halts the cascade of inflammation but rapidly begins restoring flexibility and eliminating pain. **Celadrin®** accomplishes these features by enhancing the lipid structure of the cell membrane and converting it to a super membrane enabling the cells to rapidly repair and regenerate. This unique enhancement of the cell membrane leads to the multitude of restorative, healing attributes of **Celadrin®** - including arthritis and inflammatory conditions.

In simple terms, Celadrin® improves the lubrication of joints and prevents the manufacture of compounds that produce pain and inflammation.

1) Can Celadrin® be used with glucosamine sulfate and other natural approaches for osteoarthritis?

Absolutely, Celadrin's® unique mechanisms of action complement any natural or drug therapy for osteoarthritis safely and without side effect.

2) How does Celadrin® compare to CMO (cetylmyristoleate)?

CMO is simply one of the components of the unique matrix of Celadrin®. Researchers

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discovered the mixture was more effective than the isolated CMO. Hence, Celadrin® can be simply regarded as an enhanced form of CMO.

3) Is there any difference between the various oral forms of Celadrin®?

The product has previously been available in tablets, soft gelatin, and hard gelatin capsules. Since Celadrin® is a fatty acid complex, softgel capsules may provide advantages in absorption, just as with other lipid-loving molecules (e.g. CoQ10). As well, the published clinical trials utilized Celadrin® in a softgel form.

4) Is Celadrin® safe?

The safety profile is exceptional with no reported side effects or drug interactions. Celadrin® definitely does not have any of the side effects associated with anti-inflammatory drugs such as Steroids, NSAIDS (e.g. aspirin), and COX 2 inhibitors (e.g. Vioxx, Celebrex).

5) Can Celadrin® be used on a long-term basis?

Absolutely, Celadrin® is completely safe for indefinite use without side effect. Are there any interactions with prescription drugs? There is no indication or known mechanism where Celadrin® would cause an adverse interaction with any medication.

What are the joint health benefits in summary:

1. Glucosamine as a major structural component of Chondroitin, stimulates its production.
2. Chondroitin as a major building block of cartilage helps keep it soft and flexible, and protects it from enzymatic destruction.
3. MSM strengthens collagen bonds, creating stronger, healthier cartilage
4. MSM relieves pain and reduces inflammation
5. Celadrin® increases cell membrane integrity helping to reduce pain and inflammation of damaged joint tissues.
6. Celadrin® helps provide adequate joint lubrication.

Precautions

There are some precautions in taking these ingredients. Chondroitin is chemically similar the blood thinner called heparin. Therefore, it should be used with caution in those who are taking other blood thinners such as aspirin, coumadin, or others. It is important to consult with your physician if you are on other medications, prior to taking this supplement. In addition, there have not been sufficient studies to determine the effect of these ingredients on pregnancy, and are therefore not recommended for pregnant women. If you are allergic to shellfish, you should avoid glucosamine supplements.

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