

Cetyl Myristoleate is the wonder drug for

■ Osteoarthritis

■ Rheumatoid Arthritis

- » **Harry W. Diehl, a chemist working at the National Institutes for Health (NIH) in Bethesda, Maryland isolated Cetyl Myristoleate (CM) in 1964. His research was based on the knowledge that Mice were 100% immune to Arthritis and the compound responsible for this was CM.**
- **Subsequently a research was conducted by Dr. H. Siemandi, MD, PhD on 382 patients afflicted with Arthritis which proved that CM was very effective when combined with Glucosamine and also by itself it provided excellent relief.**
  - **The first at the San Diego Clinic, reported in detail further on in this document, applied CM to 48 patients suffering from mild to crippling osteo and rheumatoid arthritis. All but two, showed remarkable improvement. The two that did not were found to have liver problems and it was surmised that, these two failed to properly absorb CM. In general, failure to properly absorb CM seems to be a major cause in it not working effectively.**

► [What makes CM different to other remedies?](#)

CM is not a pain reliever, nor is it a steroid or anti-inflammatory. It is an immunomodulator. There's never been anything like it before for arthritis. Instead of treating the symptoms of pain and inflammation, CM acts against the cause of arthritis & endash; the erroneously programmed Memory T Cells of your own immune system that cause the attacks against your joints. Once the attacks on your joints are halted the symptom of pain and inflammation is promptly remedied.

► [Does that mean a person takes CM only once and that's it?](#)

Yes. Most afflicted persons need to take the capsules for only a couple of weeks to be free of arthritis symptoms forever. No further medication is ever necessary, not even CM.

▶ Does it work for both rheumatoid and osteo-arthritis?

Both types respond equally well. It also works for most other types of arthritis such as those associated with Ankylosing Spondylitis. Reiter's syndrome. Behcet's syndrome, Sjogren's syndrome and Psoriasis. It has also been found to relieve various types of back pain of undetermined origin (probably arthritis related)

▶ Does CM improve joint mobility?

Yes, it can! If the joint can be moved, joint mobility may be improved. But if the bones have fused and grown together, only surgery can help those particular joints.

▶ Does it stop arthritis pain?

Arthritis pain will disappear completely in almost every instance. In a few extreme cases pain was reduced by only 70% to 90%, which was still of such major benefit that it allowed the persons to function normally again.

▶ Does CM reduce inflammation?

Yes, and it does so very effectively. The pressure in the joints caused by the inflammation is the major cause of stiffness and pain.

▶ How long before it takes effect?

Most people can begin to feel relief within a couple of weeks. Others may need several months.

▶ Will it correct deformities?

Yes. Deformed fingers and toes are often caused by inflammation which swells joints and pushes the bones out of place. Reduction of the swelling alone improves appearance dramatically and often allows the dislocated bones to return to their normal positions. Extreme cases may require some physical therapy.

▶ What about really severe cases?

Even most persons previously confined to bed or to wheelchairs have responded dramatically and are now no longer dependent on others for care. A number of these cases received additional benefit from repeating the treatment one more time. A few others found that physical therapy or exercise programs also helped.

▶ What about joints where the cartilage is completely worn away?

Unless the bones have fused together, the usual problem is not lack of mobility, but pain. The majority of such drastic cases have responded favorably resulting in painless movement, even in the knees.

▶ Does it work for every one?

No. CM has been able to help many individuals, but not everyone will see an improvement in their arthritic symptoms. We all have different bodies, lifestyles, eating habits, etc., therefore the results will vary. Digestive problems or liver function impairment, can sometimes interfere with success.

▶ Can I continue with my usual medications while taking CM?

Yes, but after a few days you probably will not need them. However, it's best to avoid steroids if possible.

▶ Do I have to go on a special diet?

Alcohol, chocolate, and tea should be avoided. Some users find that avoiding or limiting other foods helps improve effectiveness. A recommended diet accompanies this product, but it only need be followed for a few weeks. Many people take digestive enzymes with CM to help them absorb it. Afterwards, there are no restrictions.

▶ Will I have to exercise?

The absence of pain and return of joint mobility is so profound that normal activities will follow quite naturally. No special exercises are necessary. Actually, the usual tendency is to overindulge in the new found

freedom, sometimes temporarily resulting in soreness of muscles previously unused.

▶ [Is it okay to exercise?](#)

Yes. Many people want to lose weight and or rebuild strength once they are free to do so again painlessly. But, as with all sound fitness programs, it's best to do so gradually. Your body will need time to adjust.

▶ [Is it expensive?](#)

The cost of treatment is very modest. Most arthritis victims are already spending more on pain and anti-inflammation medications in just a few months. Since you usually need to take only one set of CM capsules, it actually saves thousands of dollars in the long run.

▶ [Is age a factor?](#)

Not really. All ages respond well. Although arthritis becomes far more common with advancing age, even very young children are sometimes afflicted.

▶ [What causes arthritis?](#)

The numerous theories about what causes arthritis have filled hundreds of volumes. But one thing we do know is that the arthritic process is regulated by Memory T Cells which have been erroneously programmed, causing attacks on your own joints and cartilage. In osteo-arthritis, this faulty programming usually results from physical damage (like a fall, sports injury, vehicle accident, repeated operation of vibrating machinery, long-term strenuous physical work or sports activities, and continuous repetitive motions of certain joints) etc. The damage results in an immune response involving the memory T cells producing attacks against the affected joints. Unfortunately, there's no stop or end command given and the attack continues against healthy cartilage and joints as well. That's why arthritis is called an auto-immune disease, our own body is attacked by our own immune cells. Although the various forms of rheumatoid arthritis are usually caused by some ineffective micro-organism. Memory T cells is again involved in the same arthritic process. Without CM it continues to worsen.

### ▶ How Does CM Work?

CM corrects the root cause of arthritis by erasing the memory of the badly programmed memory T cells. Once the destruction of your joints is halted, your body can begin its repair process without interference, and joints begin to normalize. Although the major benefits come promptly, minor improvements continue even for several months after finishing CM. With the pain and inflammation relieved, the joints can function again quite normally. Despite minor physical damage to bones as a result of long affliction, perfectly normal joint function usually returns regardless.

### ▶ Is it harmful in any way?

CM studies began at the US National Institutes of Health more than 20 years ago. Recently, clinical applications studies were conducted in San Diego. No harmful short or long-term effects were ever observed in humans, or in laboratory animals even at extremely high doses. Similar substances have long been used in common foods including cheese and chocolate, and even in medicines and cosmetics. It is a perfectly safe and naturally derived substance.

### ▶What is CM? Where does it come from?

Cerasomal-cis-9-cetylmyristoleate is the biomedical name. It is a completely natural substance found in certain animals such as cows, beavers, mice, and whales and has recently been produced from the African Kombo nut. As supplied in capsules, it is a naturally derived, highly purified and refined waxy ester prepared for oral administration.

### ▶ Is CM used for any other ailments?

Current studies include CM as a part of therapeutic protocol for other disorders with auto-immune components including multiple sclerosis, leukemia, lupus, emphysema, certain cancers, benign prostrate hyperplasia, silicon breast disease, and especially asthma. It also works for dogs, cats, horses and other animals. •

### ▶What is Cetyl Myristoleate?

Cetyl Myristoleate is an ester of fatty acid. Cetylmyristoleate, an oil, is the hexadecyl ester of the unsaturated fatty acid cis-9-tetradecenoic acid. The

common name for the acid is myristoleic acid. Myristoleic acid is found commonly in fish oils, whale oils, dairy butter, and kombo butter. The chemical formula for cetyl myristoleate is  $(Z)\text{-ROCO}(\text{CH}_2)_7\text{CH}=\text{CH}(\text{CH}_2)_3\text{CH}_3$ .

#### ► How is Cetyl Myristoleate manufactured?

Myristoleic Acid when combined with a long chain alcohol molecule cetyl alcohol, a fatty acid ester is produced known as Cetyl Myristoleate. Both the precursors are obtained from nature.

#### ► How does Cetyl Myristoleate function?

Firstly it serves as a surfactant and lubricates the entire body, making muscles glide more smoothly over other muscles, bursas, and bones and at the same time softens these tissues making them more pliable. Secondly, it functions as an immune system modulator. This is the reason it has been found to be so effective in treating auto-immune diseases such as rheumatoid arthritis, systemic lupus erythematosus, and multiple sclerosis. Thirdly, it functions like a fatty acid in that it mediates inflammatory processes. When cooled, cetyl myristoleate is a waxy substance and, at room temperature, has a buttery consistency.

#### ► What Happens When Humans Take CM?

There is a remarkable improvement reported by the patients of osteoarthritis and rheumatoid arthritis. Decreased stiffness and pain and increased flexibility and range of motion has been reported with cetyl myristoleate. Swelling and redness is reduced in rheumatoid arthritis. Writers describe other health benefits, including positive effects of cetyl myristoleate on emphysema, hepatitis, hypertension, diabetes, eczema, psoriasis, colds, allergies, low back pain, headaches and more. These reported improvements in general health status are not surprising since each of these conditions could be associated with deficiency in the balance of Essential Fatty Acids. One writer, Douglas Hunt, M.D., in his book *Boom You're Well With Cetyl Myristoleate* calls cetyl myristoleate "A New Natural Anti-Aging Disease Fighter". Like everything else, cetyl myristoleate does not work 100% of the time. Failure to work can be associated with failure to follow the dietary recommendations; failure to use lipase in conjunction with each capsule of

cetyl myristoleate; failure to take sufficient amounts of cetyl myristoleate; failure of the liver to uptake and respond to the cetyl myristoleate; and misdiagnosis in which the condition is not really an arthritis-type condition.

### ►► Dosages

10-12 grams per day is the ideal dosage for the sufferers of arthritis. Preferably over a period of 1 month. For more severe cases a double course or a higher course may also be desirable. The general rule is to take CM on an empty stomach with water

### ► Side effects

No side effects have been ever observed. Toxicity studies have been performed on cetyl myristoleate and the lack of toxicity is evident. Test results deemed cetyl myristoleate a non-toxic material in accordance with Federal regulations. Mega-doses were given to test animals with no ill effects. Necropsy of test animals showed no ill effects on the internal organs. The LD50 of cetyl myristoleate was not established, but it can be presumed to far exceed 10 grams per kilogram of body weight. While teratogenicity of cetyl myristoleate is probably the same as for EFA's, as a safety matter, cetyl myristoleate should not be used by pregnant or lactating women until studies of cetyl myristoleate's effects on fetuses and infants have been done. As with any substance being added to the diet of anyone with asthma or a history of severe allergies, the direct supervision of a health care professional is recommended. Medications do not interfere with the effects of CM except in two cases, methotrexate and steroids.

### ► Difference between EFA (essential fatty acids and CM (Cetyl Myristoleate)

The difference between the activity of EFA's and cetyl myristoleate is that the quantity required and the period of time over which EFA's are taken are markedly longer. Cetyl myristoleate is taken in a one month course of about 13 grams, while EFA's must be taken over extended periods, sometimes many years, and intake varies widely from hundreds to thousands of grams. Cetyl myristoleate seems to have properties in common with EFA's, but it

acts faster and lasts longer. Because EFA's are necessary for normal functioning of all tissue, it is not surprising that the list of symptoms of EFA deficiency is a long one. In chronic inflammatory processes, the supply of EFA's is depleted. Cetyl myristoleate appears to have the ability to correct the imbalance created by chronic inflammation. Like EFA's, maybe cetyl myristoleate turns off the fires of chronic inflammation by serving as a mediator of prostaglandin formation and metabolism.

#### ► Unconfirmed Positive effects

It is speculated that cetyl myristoleate stimulates the production of immunoglobulins and series 1 and 3 prostaglandins, which could be one explanation for why cetyl myristoleate has such potent effect in auto-immune and inflammatory conditions. Cetyl myristoleate is presently being used to treat many inflammatory conditions, including Crohn's disease; irritable bowel syndrome; chronic bronchitis and emphysema; bursitis; tendonitis; rheumatoid and osteoarthritis; psoriasis and psoriatic arthritis; muscle tension headaches; and prostatitis. The one symptom common to most disease process at one state or another is inflammation. Inflammation is a normal response by the body to injury, and functions as part of the healing process. It becomes a problem, however, when it's uncontrolled and starts to produce more tissue damage. CM has been shown to improve the symptoms of and even put into remission: rheumatoid and osteoarthritis, ankylosing spondylitis, Reiter's syndrome, Behcet's syndrome, Sjogren's syndrome and psoriasis. It has also been found to relieve various types of back pain of undetermined origin (probably arthritis related).

#### ► Synergies with CM

As with any oil, cetyl myristoleate requires lipase to be digested. Lipases are pancreatic enzymes that play a key role in the digestion of fats and fat soluble vitamins. If lipase is absent or deficient, cetyl myristoleate will be poorly absorbed, if at all. As many arthritis patients are of the age when lipase production decreases, approximately 100 mg of lipase enzyme should be taken with each cetyl myristoleate capsule. In addition to taking lipase, cholecystectomy patients will need lecithin or ox bile extract to assure absorption. As powerful a nutrient as it is, the effects of cetyl myristoleate can be helped by combining it with other natural substances. Two or three grams daily of omega-3 fish oil or two tablespoonfulls of flaxseed oil during the month-long course of cetyl myristoleate can help its effects. This should

be accompanied by 300-500 mg of Vitamin E daily. A minimum of 1,500 mg of glucosamine sulfate should be taken daily for at least three months to assist in rebuilding cartilage damaged by degenerative arthritis. In severe cases, three to six grams of glucosamine daily for one month and reduced to 1,500 mg daily for three months has been found to be very effective. Afterwards, a daily maintenance of 500 mg of glucosamine should be used for healthy cartilage. If stomach upset occurs, glucosamine should be taken with meals.

**Whey Protein:** Although the general rule is to take CM on an empty stomach with water, CM capsules may also be taken with a whey protein drink and digestive enzymes to further improve its effectiveness.

CM may be taken with digestive enzymes to improve its effectiveness. They seem to aid in the assimilation of CM through the digestive track. Enzyme mixtures that contain lipase, protease and amylase (such as Digase™) are recommended. Avoid combinations containing hydrochloric acid (HCL) or pancreatin.

Using a natural liver cleansing product like milk thistle extract, selenium, and phosphatidylcholine several days before starting CM capsules may improve its effectiveness. This is especially true among moderate to heavy users of alcohol and those on strong medications. Such cleansers among others may include milk thistle extract, selenium, and phosphatidylcholine.

#### ► **Diet Restrictions.**

Diet can play a role in optimizing the benefits of cetyl myristoleate. Carbonated cola beverages and citrus juices may block the absorption of cetyl myristoleate and should be avoided on the days cetyl myristoleate is taken. Sugar intake should be minimized when taking cetyl myristoleate, and adding refined sugar to liquids like coffee and tea should be avoided altogether. Alcohol and caffeine intake should be very limited or eliminated altogether while combating arthritis and chronic inflammatory conditions. To improve effectiveness, abstain from the use of alcohol, caffeine and chocolate during the entire period while taking CM and for two weeks after taking your final capsules. This includes non-alcohol beer, coffee (even decaffeinated), black tea, colas or other caffeine containing substances. Consult your doctor before making radical changes to your diet. Not necessarily, but to improve effectiveness Minimize or avoid eating Nightshades (tomatoes, potatoes, green, red and yellow bell peppers, and eggplant).

► Form of delivery

CM can be laid upon an absorbent bed of powder and the end product compressed into a tablet, or it can be encapsulated into a two-piece hard shell capsule, or a gelatin softshell capsule. Since cetyl myristoleate is an injectable oily substance that works best when it is injected at or near the site of the arthritic inflammation and has a very low bioavailability level in oral administration