

Maori Miracle®

A Practitioner's Guide

[CONDENSED]

Therapeutx™, the makers of Maori Miracle®, researches & develops evidence-based remedies for the safe, effective treatment of human disorders, disease prevention and the maintenance of good health. Maori Miracle® is a unique and superior arthritis formula, designed to treat arthritic symptoms, reduce inflammation, relieve pain, rebuild worn cartilage and improve joint & muscle function.

What Makes Maori Miracle® So Effective?

The balanced and synergistic combination of 4 unique ingredients:

• **GlycoMarine™** • **Kolla2®** • **Myristin®** & • **White Willow Bark Extract.**

Maori Miracle® contains GlycoMarine™

Therapeutx™ chose **Maori Miracle®** as the name for its arthritis formula because one of the ingredients, (GlycoMarine), is extracted from the New Zealand green-lipped mussel *Perna canaliculus*, which was a staple of the New Zealand Maori people's diet. Due to their regular consumption of this mussel, the Maori were essentially free from arthritis. *Perna canaliculus* is only found in one area of the world, New Zealand's Coromandel Coast.

Each daily dose of **Maori Miracle®** provides 450mg of GlycoMarine. GlycoMarine is an effective natural anti-inflammatory with chondroprotective and selective cyclo-oxygenase (COX-2) inhibitory properties and is therefore used extensively in treating arthritic disorders. GlycoMarine defends joints against cartilage degeneration and improves joint function and mobility. GlycoMarine is also gastro-protective, thus shielding the stomach from the potentially harmful effects of non-steroidal anti-inflammatory drugs (NSAIDs) and can be used on a long-term basis without the complication of significant adverse side effects.

Pharmacological Functions:

Anti-inflammatory: Inhibition of a number of pro-inflammatory neutrophil functions including, neutrophil emigration, catabolic cytokines and mediation of T-lymphocyte activity. These functions are a response to the carbohydrate component of the extract.

Anti-inflammatory: Inhibition of the cyclo-oxygenase and 5-lipoxygenase enzymic cascade with COX-2 selectivity. These functions are a response to the lipid component of the extract.

Gastro-protective: Protection of the stomach from the ulcerogenic effects of non-steroidal anti-inflammatory drugs. This activity is a response to the lipid component of the extract.

Chondroprotective: Inhibition of catabolic degradation of articular cartilage and enhancement of lubrication and buffering in the arthritic joint. This activity is a response to the amino acid and glycosaminoglycan content of the extract.

Pain relief: Due to the inhibition of pain sensitizing prostaglandins produced in the cyclo-oxygenase cascade, a degree of pain relief is effected.

GlycoMarine™ is superior to glucosamine/chondroitin sulphate based products because it is multifunctional, has significantly greater anti-inflammatory activity and also performs chondroprotective functions.

To Summarize:

GlycoMarine mussel extract in **Maori Miracle®** is able to suppress inflammation by blocking neutrophil emigration and by blocking the synthesis of prostaglandins and leucotrienes from endogenous arachidonic acid. GlycoMarine contains mucopolysaccharides, which are able to relieve arthritic symptoms by enhancing joint lubrication, boosting shock resistance and rebuilding cartilage.

GlycoMarine also contains a naturally present enzyme called steroid sulphatase, and this enzyme is able to break the bond, which holds sulphate molecules to other molecules. In our body we have a substance called *cortisol sulphate*, which, if the sulphate molecule is taken away by the bond being broken, provides a source of free cortisol. This cortisol can then stimulate the adrenal gland to release adrenaline. The natural release of adrenaline will create a feeling of well-being and the desire to be active and the ability to be so.

Therapeutx™ added GlycoMarine to its arthritis formula because GlycoMarine's effectiveness in treating all symptoms of the disease was unsurpassed in comparison to other green lipped mussel extracts. The research tweaked our interest in green-lipped mussel extracts generally, however many of the green lipped mussel extracts we tested, offered little or no benefit, only GlycoMarine showed significant benefit and met our rigorous standards for quality and purity and only GlycoMarine was supported by adequate research in relieving arthritic symptoms.

Maori Miracle® contains *Kolla2®*

Kolla2 is a superior Unhydrolyzed Type II Collagen made from 100% certified pure chicken sternal cartilage. **Maori Miracle®** with Kolla2 naturally contains all essential nutrients to maintain, protect and rebuild healthy joints, skin and connective tissue. A daily dose (3 capsules) of **Maori Miracle™** provides 450mg of Kolla2, which supplies vital amino acids (the protein building blocks of cartilage), glucosamine, chondroitin, and hyaluronic acid (HA), to maintain the water in the intercellular matrix of connective tissue and contribute to the elasticity of joint and cardiovascular health. Kolla2 naturally supplies all the nutrients necessary to rebuild cartilage.

Kolla2 repairs the damage that causes the pain and swelling associated with arthritic diseases. An advanced exclusive manufacturing technology makes the Kolla2 in **Maori Miracle®** more effective than any collagen arthritis remedy on the market today.

Kolla2® is processed using a patented low-temperature manufacturing procedure to maintain its natural low molecular weight structure that ensures biological activity for maximum results. The long chain of amino acids are left intact along with the necessary lipids (fats) insuring the body's own superior natural enzymes recognize the precise genetic code for maximum assimilation providing ultimate joint cartilage repair. When collagen type II protein is exposed to high temperature, as is the case in the manufacturing of hydrolyzed type II collagen, the delicate hyaluronic acid and sugar aminos molecules become less effective. Furthermore, the hydrolysis process washes away most of the lipids molecules. Unhydrolyzed Kolla2, which is extracted using an advanced low-temperature exclusive technology, yields healthy active cells.

A daily dose of **Maori Miracle®** (3 capsules) provides 75mg of hyaluronic acid, to moisturize and lubricate from the inside out, smoothing out wrinkles, hydrating the skin and nourishing the joints. The hyaluronic acid in **Maori Miracle®** will ease the flexing of the joints by restoring cushioning. Retention of water is one of the most important biological functions of hyaluronic acid, second only to providing nutrients and removing waste from cells that do not have a direct blood supply, such as cartilage cells. With a lower than adequate amount of hyaluronic acid, nutrients cannot be moved into these cells and waste cannot be eliminated.

Therapeutx™ added Kolla2 to its **Maori Miracle®** joint health formula because Kolla2 was found to have the highest concentration of hyaluronic acid of any Type II Collagen available and Kolla2 has been scientifically proven to restore and rebuild joint cartilage. Numerous medical journals report favorable scientific evidence that Kolla2 (Chicken Sternal Cartilage Collagen Type II) is a safe, effective arthritic treatment. In his book *Prolotherapy, The Collagen Revolution*, joint rehabilitation & sports medicine specialist Dr. Marc Darrow, M.D. recommends a daily intake of Kolla2 as the superior collagen supplement for arthritic joint disorders.

Maori Miracle® contains *Myristin*®

Myristin® [cetyl myristoleate (CM or CMO)] a cartilage-protecting nutrient, was discovered in 1964, by Harry W. Diehl, a researcher for the US National Institute of Health working in the Laboratory of Chemistry of the National Institute of Arthritis, Metabolic, and Digestive Diseases. The cetyl myristoleate molecule is a fatty acid ester from cetyl alcohol and myristoleic acid, not to be confused with myristic acid. A double blind study using Myristin to treat rheumatoid arthritis showing significant benefits was published in *The Townsend Letters for Doctors and Patients*, a respected peer reviewed journal in the alternative medicine field. The exact mechanism of Myristin's physiologic activity is unclear. As a fatty acid ester, it appears to have the same characteristics as the essential fatty acids (EFA's), linoleic and alpha linolenic acids, except stronger and longer lasting. The use of EFA's over an extended period of time has been shown to decrease the pain, inflammation, and limitation of motion of arthritis.

Whenever an injury to a joint occurs, the body answers with an immune response; these immune cells release joint-corroding substances such as protein-digesting (*proteolytic*) enzymes and free radicals that do further damage to joint tissues. There are several theories of how Myristin (cetyl myristoleate) works. One theory suggests that it targets and regulates the immune system. Myristoleate and myristate might function to alter how cells communicate. If the method by which immune cells communicate is altered, these fatty acid esters could redirect a misdirected immune response. The result is relief from arthritis.

It is speculated that Myristin stimulates the production of immunoglobulins and series 1 and 3 prostaglandins, which could be one explanation for why Myristin has such potent effect in autoimmune and inflammatory conditions.

Why Myristin® is Different? Myristin helps regulate the immune system, instead of just treating the symptoms of pain and inflammation... the cause being your immune system that attacks your joints. Once your immune system is supported, the attack on your joints stops and the pain and inflammation is significantly relieved. Myristin provides relief from pain & swelling and the return of mobility.

How Does Myristin® [Cetyl-myristoleate (CM/CMO)] Work?

Apart from its anti-inflammatory and analgesic properties, Therapeutx™ added Myristin® to **Maori Miracle®** for 3 additional reasons:

1. Myristin® serves as a surfactant and not only lubricates joints, but also lubricates the entire body, allowing muscles to move more smoothly.
2. Myristin® functions as an immune system modulator, which may be effective against autoimmune problems.
3. Myristin® functions like a fatty acid in the mediation of histamine and leukotrine response.

Dr. William Campbell Douglass explains the function of Myristin® (cetyl myristoleate) by saying: *"It is absorbed from the mid-intestine and then migrates to the joints where it attaches itself and alters the immune response to the pain and swelling."* [Second Opinion, Vol. VI, No 5 May 1986]

Therapeutx™ chose Myristin® for its **Maori Miracle®** arthritis formula because Myristin is manufactured under stringent procedures to insure the highest quality and most potent cetyl myristoleate available. Several competitive cetyl myristoleate/CM/CMO products were tested and found to have little or no cetyl myristoleate content. Additionally the most favorable research results for treating arthritic disorders were found when the patients were using Myristin® over any other cetyl myristoleate product.

Maori Miracle® contains *White Willow Bark Extract*

White Willow Bark contains salicin, which the body converts to salicylic acid and has the same effect as aspirin without the side effects. Specifically, it helps to relieve pain associated with inflammatory conditions like rheumatism, arthritis, muscle aches and carpal tunnel syndrome. White willow bark contains tannins and flavonoids, which probably account for some of these benefits. There are no major side effects known at this time. However, due to the tannins in white willow, some may develop stomach upset. Also, due to the chemical similarity to aspirin, avoid white willow bark if you have had any allergic reaction to aspirin.

Some experts believe that although both aspirin and white willow bark extract will reduce fever and pain, white willow's benefits last longer and it does not harbor the same serious risks as aspirin, such as possible stomach bleeding. Aspirin and related anti-inflammatory drugs are notorious for irritating or damaging the stomach. However, when taken in typical doses, willow does not appear to produce this side effect to the same extent. This may be partly due to the fact that most of the salicylic acid provided by white willow comes from salicin and other chemicals that are only converted to salicylic acid after absorption into the body.

Safety Issues

White willow bark extract doesn't impair blood coagulation to the same extent as aspirin. Nonetheless, it seems reasonable to suppose that if it is used in high doses willow could still cause the side effects associated with aspirin. Generally speaking, the risks of aspirin therapy potentially apply. For this reason, white willow should not be given in full doses to children, due to the risk of Reye's syndrome, or to those with aspirin allergies, bleeding disorders, or kidney disease. At standard doses (120mg – 240mg/day, willow may interact adversely with anti-coagulants and other anti-inflammatory drugs such as methotrexate, metoclopramide, phenytoin, probenecid, spironolactone, and valproate. Although the concern with blood thinners relates to standard doses of willow bark offering between 120mg and 240mg of salicin; a daily dose of **Maori Miracle®** (3 capsules) contains only 22 ½ mg of salicin.

Therapeutx™ purposely incorporated a smaller amount of white willow bark extract into **Maori Miracle®** because many arthritic sufferers are middle aged or elderly and are on blood thinners; that being the case, we set the willow bark extract amount in each capsule lower, so as to provide some benefit without adversely affecting those on blood thinning/anti-coagulant medication. If you are taking blood thinners, please discuss this information to your doctor or health care provider.

Please visit our web site at www.therapeutx.info for further information on Maori Miracle® and other Therapeutx™ products. We welcome your comments.