# Mangosteen Juice

In Southeast Asia (in countries like Malaysia, Taiwan, Indonesia, Vietnam and Southern parts of India), the Mangosteen (Garcinia Mangostana) fruit is considered a prized fruit. It's often called the Queen of Fruits because it taste great and it has many medicinal healing benefits. The Mangosteen fruit has a sweet, mild flavor that is out of this world. The Mangosteen is not a large fruit, it's about the size of a tangerine. A ripe Mangosteen fruit has a smooth, dark purple rind surrounding a white fruit.

Mangosteen has no relation to the mango fruit. Mangosteen belongs to the family Guttiferae. Two relatives (St. John's Wort and Garcinia Cambogia) are already known as medicinal plants.

The Mangosteen possesses a unique class of phytoceuticals called "xanthones." Xanthones are molecules found in plants and are composed of stable carbon-structure molecules. Xanthones have been demonstrated to be effective in inhibiting inflammation as well as serve as potent antioxidants in combating free radical damage.

Monosteen's versatility comes from its unique chemical makeup. Over 200 xanthones exists in nature, approximately 40 have been identified in Magosteen. Each xanthones has the same molecular skeleton but unique chemical accessories known as side chains that permit each xanthones to perform a specific biological function. For example, alpha-mangostin serves as an antioxidant, gamma mangostin as an anti-inflammatory and Garcinone E as an anti-tumor agent.

Mangosteen is available in USA in form of juice. Mangosteen juice, made from a whole fruit is as safe to drink as orange or apple juice.

## **Facts about Mangosteen**

- Magosteen has anti-inflammatory properties. Mangosteen's xanthones have been demonstrated to possess potent anti-inflammatory properties without the risk of other complication. Medical science answer to inflammation problem with anti-inflammatory drugs such as indomethacin, aspirin, and dexamethasone. These drugs can cause severe side effects at times as severe as the original inflammatory disorder. The natives of Southeast Asia employed Magosteen to stop the pain of inflammation. Also, they used the rind of the fruit to treat diarrhea and dysentery.
- Mangosteen has antioxidant properties. Xanthones from the Mangosteen fruit are potent antioxidants. Xanthones inhibit oxidation of LDL cholesterol. Mangosteen possesses more powerful antioxidant properties than vitamin E.
- Mangosteen has strong anti-microbal properties. Anti means against tiny microorganisms (like yeast, mold and viruses). It has anti-bacterial properties. Manogosteen's xanthones inhibit the reproduction of strains of bacteria. This is another very important property of this amazing fruit,

since a challenge facing the global medical community. The challenge is the bacterial resistance to chemical antibiotics. Mangosteen stops the growth of Staphylococcus bacteria, and Salmonella enteritidis bacteria. Also, it is effective in stopping various types of fungal growth.

# **Mangosteen's Applications**

Mangosteen juice has many useful applications for the body. The list of health conditions that are benefits from Mangosteen juice supplementation includes:

- Ulcerative colitis; Mangosteen's potent antioxidant effects help to counteract the free radical damage that some immune cells (neutrophils and macrophages) cause. Preservation of mucosal function is the result of this action. Mangosteen also has antiviral and anti-bacterial effects, which help most of the disease's serious complications. Finally, Mangosteen's xanthones (biologically active ingredients) have proven anti-inflammatory benefits. Take 1 – 2 oz before meals.
- Crohn's Disease; as with ulcerative colitis, the Mangosteen addresses the problems of inflammation, immune cell damage, and treat of the infection in Crohn's disease. Treatment with Mangosteen in Crohn's disease necessitates starting with a low dose once a day, then increasing the frequency to 3 times a day before gradually increasing the amount of each dose. Effects are slow and at least 2 months of treatment is necessary to gauge the results. Start with very small amounts of Mangosteen juice (1 tablespoon to 15 ml) before one meal a day and gradually increase weekly by the same amount until patient is taking 2 ounces before each meal.
- Diverticulitis; Mangosteen juice with its anti-inflammatory and antimicrobial effects decrease the frequency of attacks. Taking 1 ounce a day usually keep free from the symptoms of this health disorder.
- Diarrhea
- Dysentery
- Gout can be effectively treated with Mangosteen and severity and frequency of attacks can be reduced by the daily consumption of this antiinflammatory supplement.
- Rheumatoid arthritis: Mangosteen with its powerful anti-inflammatory effects has been found to be very helpful.
- Juvenile rheumatoid arthritis; Mangosteen has proven helpful in many cases of juvenile rheumatoid arthritis and should be used at least 3 times a day.
- Osteoarthritis; Mangosteen is highly recommended with its reach antioxidant, anti-inflammatory properties. The Mangosteen's value as a joint supplement is it's proven ability to act as an effective COX-2 selective inhibitor. At this point, it is appropriate to emphasize that the Mangosteen is the sole botanical anti-inflammatory with such proven COX-2 inhibition properties. In all arthritic conditions maintenance levels is 1 2 oz of the juice 3 times daily before meals. For flare-ups such as are experienced in

gout and rheumatoid arthritis, a doubling of the servings during the attack is helpful.

- Asthma; Mangosteen xanthones are powerful anti-inflammatories. They have antiviral qualities that can lead to a reduction in the number of viral infections in humans. They have very potent antioxidants and help to counteract the free radical damage of air pollution, and finally, they have been shown to have anti-allergy effects. Mangosteen extract is an ideal agent to deal with all four asthma pathologies: infection, inflammation, free radical damage and allergic triggers. Take Mangosteen juice 1 2 oz up to 3 times daily before meals.
- Natural hormone therapy; Mangosteen juice is a natural alternative for women trying to regain hormonal balance. For its unique properties this juice could be the base of any natural hormone therapy. Ancient cultures used mangosteen to help with "women's issues."
- Cancer; Mangosteen's xanthones (phytoceuticals found only in this plant) have proven ability to destroy cancerous cells in laboratory studies. For example, garcinone E, a xanthone, was more effective than 5 commonly used chemotherapy agents (vincritine, mitoxantrone, 5-flourouracil, cisplastin and methotrexate) for stomach, lung and liver cancer in a recent well-designed in vitro study. Mangosteen phytoceuticals protect us from cancer by several ways and means. The most accepted theory of cancer development:

#### Step one

The genetic material (DNA) of the cell is damaged by free radicals from pollution, metabolic residues and infection or disease and MUTATION occurs.

## Step two

The damaged cell divides and begins to disobey the rules of normal cell replication. Cancer now exists.

#### Step three

Tumor-promoting agents such as PGE 2 then stimulate the growth of the tumor often leading to metastases.

Where do the Mangosteen intervene in this deadly process? The answer is that in addition to being anti-tumor agents, when cancer already exists, they prevent and arrest cancerous change at every step. It is quite impossible for us to avoid exposure to cancerous and the free radical assaults that follow, but the antioxidants and other active phytoceuticals in mangosteen can provide protection from critical cell damage. They do this by regulating gene expression, repairing free radical damage and blocking the production of tumor-promoting agents. They impede the promotion and the progression of cancer when DNA damage does occur. Finally, they directly attack tumor cells. Take 1 oz or more 1 – 3 times daily for cancer prevention. Take 2 – 3 oz or more 2 – 3 times daily if cancer is present.

- Multiple Sclerosis (MS); Mangosteen's xanthones are powerful anti-inflammatories and appear to work by diminishing the damage of inflammation both during and between attacks. Additionally, experiments with powerful antioxidant therapy have shown protective effects upon the myelin sheaths (nerves are covered with this fatty substance) when they attacked by the immune system. Macrophages, using bursts of free radicals to damage myelin, are major contributors to the pathology of MS and Mangosteen extract has potent antioxidant effects. Finally, the antimicrobial protection of Mangosteen can prevent the initial infections that lead to MS as well prevent recurrent urinary tract and bedsore infections in patients with advanced disease. Take 1 2 ounces 2 3 times daily before meals.
- Arteriosclerosis; Mangosteen fortifies the cardiovascular system through its anti-microbial, anti-inflammatory and its antioxidant effects. For existing disease use 1 – 2 ounces before meals. For prevention, one ounce per day.
- Fibromyalgia with its related health disorders; Mangosteen helpful for pain management; The Mangosteen contains a selective COX2 inhibitor, the only botanical proven by research to possess such properties. COX2 is an enzyme constitutive (i.e. always present) in the cerebro-spinal fluid and directly involved in pain perception. The suppression of COX2 by Mangosteen is presumptive means by which fibromyalgia pain is modified. Sleep disturbance is a common finding in fibromyalgia. The Mangosteen's xanthones appear capable of restoring normal restorative sleep. Mangosteen's ability to provide energy and combat fatigue is welcomed by fibromyalgia patients. When depression and anxiety are present, they are often relieved as well. Summary: Mangosteen effectively relieves the pain, muscles tenderness, fatigue and sleep disturbance of fibromyalgia; Take 1 2 ounces before every meal.

<u>Guideline for general usage:</u> For preventive purposes a minimal daily amount is one ounce of Mangosteen juice. For serious or chronic conditions it is may be required up to 8 ounces daily (preferably taken as 2 ounces up to 4 times daily). Incremental increase of dosage over several weeks will help determine how much is needed for acceptable effects in each individual. Taking the Mangosteen supplement before meals insures better absorption.