

# Gammaqui

## The Miracle Of **SUPERFRUIT**



**The Secret Healing Powers of  
Goji Berry, Açai Berry, Mangosteen and Maqui Berry**

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# Foreword

For centuries cultures from all over the world have handed down secret remedies incorporating exotic fruits and berries. The secret behind their mysterious healing powers was never challenged or researched; these people just knew they worked.

As the news of these miraculous healing “superfruits” began to surface in modern societies, medical and health professionals started to inquire about their validity. Were these just anecdotal, placebo-based, half-truths-- or a healing gift bestowed upon us by our Creator? The quest for “truth” led to the revelation of many naturally occurring healing compounds contained in these wonderful superfruits.

Our research shows the most powerful and synergistic of the “superfruits”, those which seem to contain the most complete balance of these life changing compounds are Goji Berry, Açai Berry, Mangosteen, and Maqui Berry. These superfruits are the basis for our incomparable Gammaqui product.

# Introduction



**The Goji Berry** (or wolfberry, the common name for the fruit of *Lycium barbarum*.) grows on extensive vines in the sheltered valleys of the Himalayas in Tibet, and in Mongolia. It has occupied an important place in traditional Asian medicine for generations. The goji is nicknamed the “happy berry” because of the sense of well being it is said to induce. Special care is taken in the harvesting of the

goji berry. The round, red berries are extremely tender and have to be shaken from the vine rather than picked in order to avoid spoiling. The berries are then preserved by slowly drying them in the shade.



A traditional story from the Tang dynasty in China (around 800 A.D.) tells of a well that had been dug next to a Buddhist temple which happened to be surrounded by goji vines. Those who prayed there and drank the water from the well had "strong" health and lived to a ripe old age without their hair graying or their teeth falling out. They didn't know anything about scientific studies. The berries that fell into the well enriched the water turning it into a fountain of life for anyone who drank there!

The goji berry was named in the July 24<sup>th</sup>, 2006, issue of *Time Magazine* as the “Breakthrough Superfruit of the Year”.



**The Açai Berry** is one of the most nutritious and complete foods in the world! Açai (ah-sigh-EE) is the high-energy product of a special Amazon palm tree. Harvested in the rainforests of Brazil, açai tastes like a vibrant blend of berries and chocolate. Hidden within its royal purple pigment are the ingredients that make it nature's perfect healing food. Açai is packed full of antioxidants, amino acids and essential fatty acids *in exactly the right*

*combination for easy assimilation and use within the body.*

**The Mangosteen fruit** has been used for medicinal purposes for centuries in Cambodia and South East Asia. Modern health practitioners have used mangosteen, in various forms, to



treat a wide spectrum of health ailments and conditions with a great deal of success. This has produced a wide variety of anecdotal testimonials. But could it be proven? The many amazing testimonies from those helped by the "Queen of Fruit" certainly piqued the curiosity of scientists and health professionals and compelled them to investigate whether these health experiences were merely anecdotal or if, in fact, there was real scientific proof to support them.

As the medical research was completed, what folk doctors and personal testimonials have shown for centuries was validated! Through laboratory testing and in clinical studies, the research has found that this amazing fruit contains anti-oxidant compounds called

xanthones, which are some of the most powerful anti-oxidants ever discovered. xanthon

Studies have also shown mangosteen to have the highest Cox-2 inhibitor (anti-inflammatory) action of anything found in nature.



**The Maqui Berry** (*aristotelia chilensis*) is a delicious, deeply purple berry from Chile loaded with anthocyanins, a potent group of antioxidants which give the berry its coloration and provide many documented health benefits. The maqui berry has the highest concentration of antioxidants of any known food source. It has several times the antioxidant content and activity of the previous champion, the açai berry. It is also packed with other nutrients that give it many powerful and desirable health-promoting qualities.

Free radical damage causes most of the changes we associate with aging, and it can lead to inflammation, cardiovascular and nervous system damage, impairment of immune function, and even cancerous changes in cells. Antioxidants are able to donate electrons to free radicals without themselves becoming particularly unstable and damaging.

The particular antioxidant compounds that are found in abundance in the maqui berry are mainly flavonoid compounds known as anthocyanins and polyphenols. Anthocyanins have some of the strongest physiological effects of any plant chemicals, and have been found to have the strongest antioxidant activity of any flavonoids. When ingested by humans, anthocyanins provide anti-aging effects, promote cardiovascular health, reduce the likelihood of cancerous degeneration in cells, reduce allergic responses, and support healthy sugar-insulin metabolism.

The polyphenols in Maqui berry reduce unhealthy inflammation (it has the second highest Cox-2 inhibitor action). Polyphenols promote cardiovascular health, offer additional protection against cancerous changes, and provide even more anti-aging impact.

**Why We Need "Superfruits:** In the last 15 years, the increased worldwide threat of pandemic events, the contamination of our water supplies, the pollution of the air we breathe, the nutritional deterioration and genetic altering of our food sources, has given us no choice but to seek alternative methods for staying healthy and building our body's defense systems.

When you add to this list the abuse of prescription medications, high simple carbohydrate diets, high fat intake, smoking, soft drinks, alcohol, etc., and without the addition of high quality supplementation we fall victim to a variety of different degenerative diseases that appear to be a part of today's life challenges.

Through research, clinical studies and "infield" use by health professionals there has emerged evidence of superior food sources of dynamic and complex nutrients. These amazing food sources are classified as "**Superfruits.**"

The following chapters will reveal those healing secrets of the Himalayas, the Amazon Rainforest, Brazil, and Patagonia.

## Chapter 1: ANTIOXIDANTS – FREE RADICALS - ORAC

The basic underlying cause of disease is at the cellular level and is created by free radical attacks on the structure of the cells. Free radicals are usually generated by one of three methods; (1) normal metabolic processes within the body, (2) environmental factors (smog, smoke, pollution, radiation, pesticides) and (3) chemical invasion (there are over 10,000 chemical additives in our foods).

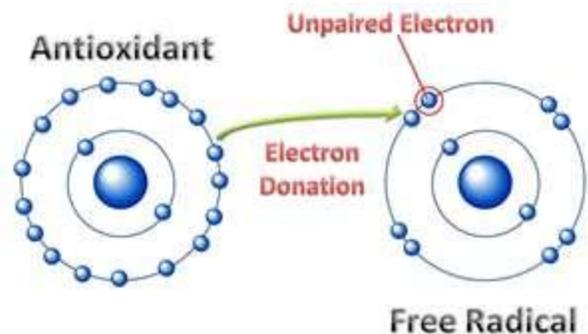
Of particular importance is that free radical damage accumulates and accelerates with age.

Free radicals are very unstable and react quickly with other atoms or molecules, trying to capture needed electrons to gain stability. Generally, free radicals attack the nearest stable molecule, "stealing" its electrons. When the "attacked" molecule loses its electron(s), it becomes a free radical itself, beginning a chain reaction.

Oxidative stress (free radical damage) has been shown to cause physical deterioration within the cells, tissues and organs of the body and seems to be related to maladies such as cancer, heart disease, old age problems and other chronic and degenerative conditions.

Once the process is started, it can cascade, finally resulting in the disruption of a living cell. The DNA of a cell is often the target of this electron stealing which can lead to mutation within the cell. If antioxidants are unavailable or if the free-radical production becomes excessive, the body can become overwhelmed creating unhealthy and dangerous conditions which can cause damage to occur. Of particular importance is that free radical damage accumulates with age.

**Antioxidants** are elements or molecules that have the ability to neutralize free radicals by donating their own electrons, ending the electron-"stealing" reaction. The antioxidants themselves don't become free radicals by donating electrons because they are stable either with or without the electron. They now act as free radical scavengers, helping to prevent cell and tissue damage that could lead to cellular damage and disease.



**ORAC** stands for Oxigen Radical Absorbance Capacity. ORAC is a valuable indicator of how much antioxidant activity there is in any given food source. The mangosteen xanthenes show one of the highest ORAC values of any food, making them one of the best natural sources of antioxidants available to help the body overcome free radical damage.

## Chapter 2: Goji Berry



The Himalayas are the highest mountain range on Earth. Although covered in snow and ice at its higher elevations, its lower elevations are draped with gorgeous, unspoiled rainforests and lush valleys. It's here that the Himalayan Goji plant (*lycium barbarum*) grows. The ecosystems of the Himalayas include incredibly rich, diverse and uncontaminated nutrients containing abundant life-giving minerals, that the goji plants concentrate in the nutrient-dense berries. At the higher elevations all plants naturally concentrate more nutrients to better absorb the energy from the powerful rays of the sun. When you eat the goji berry or drink the juice, that energy is transferred to your body. Goji is considered to be one of the *world's most*

*nutritionally dense foods.*

The goji berry has been used as a food staple in Asian cultures for thousands of years. And like other superfoods under scientific investigation it reveals itself to be packed full of phytochemicals known to have health-promoting effects. Goji berries have been shown to beat even beans when it comes to nutrient density, such as protein. The deeply colored berries are especially loaded with antioxidant nutrients, from which their colors come. You may have read about the nutritive value of other kinds of berries, in particular blueberries, raspberries and cranberries. Goji shares many of their best characteristics, plus some that are unique to this unusual berry.

Goji grows in many parts of the Far East. Chinese medicine has long included lycium, the main ingredient in goji, in its pharmacopoeia. Oriental medical texts indicate its use for the treatment of "chi deficiency", which manifests itself in the form of low energy, insomnia, heart palpitations, and anxiety. As it has been with many natural remedies, including ginseng and ginkgo, Asian medicine is at the forefront of goji research. Chinese researchers have isolated several promising phytochemicals and other nutrients not found anywhere else. Their research indicates the goji may help heal or prevent chronic fatigue and cholesterol oxidation, while, at the same time supporting the immune system. Other studies support the fact that goji can defend the body against free-radical attacks, hypertension-induced damage to kidney cells, and periodontal disease.

Long before the development of modern techniques for nutritional analysis, evidence of the remarkable health benefits of goji were being passed down through Asian cultures by oral testimonials and by traditional use by their natural health practitioners. In relatively modern times, science began to look at those cultures to see what they were doing differently. Is it just coincidence that these cultures happen to contain people who tend to live long lives free from the chronic diseases of fibromyalgia, depression, anxiety, sexual dysfunction and chronic fatigue syndrome that are epidemic in Western culture?

These peoples' lifestyle certainly promotes good health, but researchers were looking for a *unique* factor that contributed to the tremendous longevity of the people in these areas. When researchers went into these kinds of communities in the Himalayas and surrounding areas, they found that almost everyone ate regular helpings of goji. This was enough for them to want to take a closer look at the longevity-promoting qualities of this plant.

As these researchers began to examine goji's nutritional composition, they expected to find that it was similar to the composition of other plants in the same genus. They were astounded to find that goji contained these unique properties and phytonutrient compounds:

1. **Polysaccharides** that are of great importance to the smooth functioning of virtually every cell in the body. They are the carriers of the instructions that cells use to communicate with one another. In combination with amino acids they allow the body to build, replace and repair cells and tissues.
2. **Nineteen amino acids**, including all eight essential amino acids (such as isoleucine and tryptophan) which are indispensable in maintaining the functions of the human body. Fifty percent of goji's amino acids are free amino acids, and are extremely bioabsorbable.
3. **More protein** than whole wheat, a total of 13 percent.
4. **B-complex vitamins**, needed for the transformation of food into energy.
5. **A broad spectrum of antioxidant nutrients**. This includes flavonoids, zeaxanthin (an eye protectant) and beta-carotene (in higher concentrations than in carrots. Goji has the highest content of beta-carotene among all foods on earth).
6. Goji has the **second highest ORAC reading** of the superfruits.
7. **Its rich antioxidant content** has a protective effect on your skin against free radical damage from the sun, chemical exposure and aging.
8. **A higher concentration of vitamin C than** oranges (according to herbalist Ingrid Naiman, 500 times more per ounce).
9. **Contains substantial amounts of vitamin E.**
10. **Beta-sitosterol**, a substance that decreases inflammation and has been successfully used to treat sexual impotence. It has also been found to alleviate the symptoms of benign prostatic hyperplasia (BPH, prostate enlargement). This might explain why goji juice has been reported to help improve urine flow and help BPH patients sleep longer without having to get up to urinate.
11. **Essential fatty acids (EFAs)** for the production of hormones, regulation of inflammation, and for proper nervous system function.
12. **A sesquiterpene called cyperone**, which has been found to benefit heart health, lower blood pressure, alleviate menstrual discomfort and is also is a promising natural therapy for cervical cancer.
13. **A powerful anti-fungal and anti-bacterial** compound called solavetivone.
14. **A natural compound called physalin** that increases natural "killer cell" activity in both normal and tumor-bearing mice. It has been shown to be active against leukemia and to have broad-spectrum anti-cancer effects. Physalin is also being tested as a therapy for hepatitis B.

15. **Betaine**, which is used by the liver to produce choline, a substance that, when taken in supplemental form, calms nervousness, enhances memory, promotes muscle growth, and protects the liver against fatty accumulation. Along with other B vitamins, betaine helps to reduce levels of the amino acid homocysteine, which is a leading contributor to heart disease.
16. **Twenty-one trace minerals**, including germanium (vitamin O), an anti-cancer mineral very rarely found in foods. Germanium can help to eliminate or neutralize toxic substances, including heavy metals and free radicals, both of which are strongly implicated in causing age-related and chronic diseases. It has been studied for its radioprotective (radiation protection) and immunoenhancement (immune system building) properties, and even shows promise as an anti-arthritis supplement.

Several studies have been performed to evaluate the effects of germanium on the development of artery plaque (atherosclerosis) that lead to heart attack and stroke. Germanium has been found to prevent liver injury inflicted by excess oxidation.

Everyday exposure to toxins and poor diet can lead to the overproduction of free radicals in the liver. In one study, cancer patients on chemotherapy were given goji berries as part of their everyday diet. The berries' selenium and germanium content significantly reduced chemotherapy-induced free radical damage to their livers.

In addition, goji berries contain more **Ellagic Acid** per gram than any other known food. Ellagic acid acts as a major liver detoxifier. Ellagic acid seems to arrest cancerous growths of all kinds from the colon to the lung to the skin.

**In a nutshell, the small, delectable goji berry is a nutritional dynamo. The studies are only backing up what we already know about this wonderful superfruit.**

For example:

- In vitro studies show that goji berries kill many kinds of cancer cells, probably by inhibiting their ability to divide and produce more cancer cells.
- One study found that cancer patients who ate goji berries had 58 percent slowing of tumor growth compared to controls.
- A study from the Hubei Medical University in China showed that a purified component of goji polysaccharides dramatically enhanced the ability of mice to swim for long periods and to increase the amount of exercise they could do.
- In a study by another group of Chinese researchers, molecules from goji berries were found to inhibit the oxidation (creation) of "bad" LDL cholesterol. LDL oxidation is believed to be one of the primary factors in artery damage that leads to heart disease.

There are a multitude of medical research documents and published studies [www.pubmed.gov](http://www.pubmed.gov) of the health benefits of goji as well as mangosteen and açai berry.

## Chapter 3: Açai Berry (ah-sigh-EE-)

We are so blessed to live in an era when research and discovery have uncovered the most powerful and significant nutritional food sources of our lifetime. First, it was the discovery of the antioxidant protection of grape seed extract. Then it was the resveratrols in the grape skin that helped grapes gain increased notoriety for antioxidant capability. Then there were the studies done on red raspberry seed extract and its significant effect on apoptosis (normal cellular death process) of mutated or cancerous cells. Very quickly the extraordinary anti-fungal and anti-viral properties of berries came to the forefront.

However, today it's the news of the antioxidant and anti-inflammatory benefits of açai berry that has taken the nutrition world by storm! With ten times the antioxidants of grapes, four times the antioxidant protection of red raspberries, and twice the antioxidants of blueberries, the Brazilian açai berry (ah-sigh-EE) is considered to have the best nutritional value of any fruit on earth. The health benefits are astounding. With the symmetry of a grape and the size of a giant blueberry, the açai fruit tastes a bit like wild raspberry with a hint of grape. Most people have trouble putting their finger on the taste because it's so different.

The açai is a treasure, a *one of a kind* plant found in the 1.2 billion acre tropical rainforests of the Amazon jungle. This area of the earth houses the largest collection of living plant and animal species in the world, many of which exist nowhere else on earth. Since the beginning of time, these finite stores of natural resources have contributed a wealth of substances for the survival and well being of mankind. In fact, at least 3000 edible fruits are hidden throughout the Amazon rainforest. While the region's inhabitants use about 2,000 of these fruits, only 200 have been made available for use in the Western world. However, the natural healing properties of these treasures have not gone unnoticed by the scientific world. In fact, the prestigious U.S. National Cancer Institute has reported that "70% of the plants that are known to be active against cancer cells can be found in the rainforest."



The açai palm is a tall slender South American (concentrated in Brazil, Guyana, and Suriname) palm grown for its fruit as well as for the "cabbage" (the cluster of new leaves more commonly called the "heart of palm"). It prefers swampy areas, and grows quickly. The fronds were (and still are) used for thatching and weaving. Each açai palm tree produces small deep purple, almost black, fruit (berries) in groups of 3-8 per bunch. The fruit is edible, and its pulp is used in wines, liqueurs, as flavoring, as colorant, and on its own as a juice.

Nutritional science has established that fruit rich in color is also rich in nutrients. Brightly colored fruits naturally contain high levels of antioxidants and phytonutrients, in fact, the brighter and deeper the pigments, the more intense and potent the nutrient levels. So it is

with the açai berry, which is known for its strength, energy, and richness, just like the rainforest from which it comes.

Açai berries have been highly touted for hundreds of years by Brazilian natives for their ability to provide a sense of strength, energy, and a high nutritional content. Açai berries are extremely high in essential fatty acids and the omega oils 3, 6, & 9.

Açai berries contain 60% Oleic (omega 9), a monounsaturated essential (fatty acid which helps to lower LDL (harmful cholesterol), while 12% Linoleic (omega 6) - a polyunsaturated essential fatty acid which has also been found to lower LDL, while maintaining HDL (good cholesterol).

Açai also contains many valuable phytosterols. Phytosterols are compounds contained in plant cell membranes which provide numerous benefits to the human body, namely the reduction of blood plasma cholesterol.

Açai berry also contains theobromine, a bronchia dilator. This may help to relieve the symptoms of asthma and/or allergies without using harmful stimulants.

The açai berry is considered to have the best nutritional value of any fruit on earth and is currently thought to be #1 among the elite group of top antioxidant foods.

The açai berry is a prime source of a particular class of antioxidant flavonoids called anthocyanins. Anthocyanins produce a high ORAC value (a measure of its antioxidant properties). The açai berry has the second highest ORAC reading after the maqui berry.

The protective properties of the açai berry are said to be provided by the high anthocyanin content. The following properties are considered by experts to possibly be the most significant contributions by anthocyanins towards good health.

- **Large and Small Blood-Vessels:** Anthocyanins ability to neutralize free radicals and prevent oxidation of cells makes them a powerhouse in the fight against arteriosclerosis. Even in trace amounts, anthocyanins effectively protect against LDL oxidation. Anthocyanins protect the integrity of the endothelial cells that line blood vessel walls and help to maintain micro-capillary integrity.
- **Eyesight:** Anthocyanins may help improve eyesight by numerous mechanisms. For example, in the Second World War, British fighter pilots who consumed bilberry were found to have improved night vision. Taking advantage of this knowledge, the pilots would consume the bilberry fruits just prior to the mission. However, the effect of the improved night vision was only temporary because of the small quantity of anthocyanins present in the bilberry. The protection provided by anthocyanins may help prevent capillaries from leaking which is considered a main cause of diabetic retinopathy (which in most cases can cause blindness).
- **Inflammation and Collagen:** Anthocyanins neutralize specific harmful enzymes that destroy connective tissue. Their antioxidant capacity also prevents oxidants from damaging connective tissues, which reduces the effects of ageing and facilitates the repair of damaged blood-vessel walls.

- **The Nervous System:** The anthocyanin properties in Açai may help protect against neurological diseases. The primary anthocyanins in Açai known as Cyanidin-3-glucoside have been found to help in the reversal of age related neurological degeneration.
- **Urinary tract:** Açai comes from the saw palmetto family whose phytosterols promote prostate health.
- A recent study from the University of Florida states that extracts from açai berries triggered “a self-destruct response in up to 86 percent of leukemia cells tested.” This was published in the *Journal of Agricultural and Food Chemistry* by Stephen Talcott.

Research documentation pertaining to this study can be found on [www.pubmed.com](http://www.pubmed.com)

The dynamics of the health benefits from these healing compounds in açai berry will be a favorite topic of researchers for years to come.

# Chapter 4: Mangosteen



## MANGOSTEEN HISTORY

The mangosteen, scientific name *garcinia mangostana*, was named for the French priest, explorer and plant collector, Laurentiers Garcin (1673 – 1751). The place of origin of the mangosteen is unknown but is believed to be in Southeast Asia, probably the Malay Archipelago.

The mangosteen tree is tropical. Now that its healing properties have been rediscovered you will find them being cultivated in commercial plantations in Thailand, India, Malaysia, Vietnam and the Philippines. It can also be found growing in Puerto Rico, Australia and Hawaii.

Mangosteen trees are dioecious, meaning that there are male trees and female trees. The only problem with this is, that to date, no one has been able to find a male tree anywhere in the world. So, if they exist, they are quite rare. It is possible that there have never been any male mangosteen trees. This places the entire burden on the female tree to perpetuate the species. As a result of this, it produces a clone of the mother tree with very little or no genetic variation. This means that, if they are produced by a high quality ethical laboratory, the products produced from the mangosteen are going to be very consistent.

The mangosteen fruit is composed of pericarp (rind), pulp (fruit), and seeds. The pericarp is a dark-purple, smooth rind about  $\frac{1}{4}$  to  $\frac{1}{2}$  in. (6-10 mm) thick which covers the pulp. The pulp is composed of four to eight triangular segments of a core 1.5 to 3 inches in diameter of snow-white, juicy, soft flesh that's slightly acidic in flavor.

Ripeness of the mangosteen fruit is gauged by the full development of color with a slight softening of the pulp. The fruit must be hand picked and done so when it is mature for they will not ripen after picking, which is a big factor when one considers the efficacy and purity of the finished mangosteen product.

## XANTHONES

The most active medicinal properties of the mangosteen are the xanthones. Xanthones are a new class of chemical compounds with biologically active plant phenols structurally similar to flavonoids, the powerful antioxidants present in grapes. They are a unique, biologically active group of molecules possessing a molecular bonding structure that is very stable and extremely versatile. The chemical construction of xanthones allows them to have beneficial properties (i.e.) anti-allergic, anti-inflammatory, anti-tuberculosic, anti-tumor, anti-platelet agglutination (clotting), beta-adrenergic blocking and anti-convulsant.

Scientific research is making it increasingly evident that xanthenes are the substance responsible for the wide range of medicinal benefits experienced by people who use mangosteen. What's remarkable about mangosteen is that there are 43 xanthenes identified in the *pericarp*, making it the single most xanthone-rich source in the world. Each xanthone has its own effect, and when combined, they take on a synergistic quality that supports the health of the entire body.

There are over 200 xanthenes found in nature, and each has a different function.

Over 50 studies and research papers have been written on the mangosteen. Most of the studies have focused on the pericarp, as opposed to the fruit. The pericarp contains the most active xanthone compounds. The fruit does have some beneficial elements, but they do not seem to be as potent and have not been studied as thoroughly as the pericarp.

## MANGOSTEEN AND INFLAMMATION

Inflammation is the body's normal protective response to any type of invasion or injury. Inflammatory stimuli, such as bacterial infection, trauma, ischemic events, stress-related events, toxic exposures, allergens and chronic viral infections activate the inflammatory cascade response (irritation => inflammation => tissue destruction).

All organs tissues, arteries, and tubes (colon, urinary tract, etc.) have a membrane lining. Various situations and personal practices (think high body acidosis) create irritation which causes swelling and deterioration of these membranes. To try to help itself, the body sends fluids, enzymes and white cells to the area. Inflammation is the body's way of protecting itself while initiating the healing process. This may create redness, heat, swelling, pain and loss of function.



However, when the "healing" inflammation doesn't shut down, it becomes chronic and eventually does damage to the injured tissues. Chronic inflammation, if left unchecked, can do more harm than good. There are tens of millions of people in the U.S. with chronic pain due to inflammation of this sort.

As the scientific understanding of inflammatory processes has grown, we have learned that **inflammation overtaxes the immune system and allows chronic disease conditions to develop**. For example, atherosclerosis, once thought to be caused primarily by the abnormal accumulation of lipids in arteries, is now understood to be a pathologic response to arterial injury and the subsequent inflammatory cascade.

Inflammation has long been linked to both rheumatoid arthritis and osteoarthritis. Now, there's emerging research that also links chronic inflammation to allergies, asthma, Alzheimer's disease, diabetes, most digestive disorders, heart disease, chronic obstructive pulmonary disease, hormonal imbalances, osteoporosis and cancer.

- **Cancer:** Inflammation increases the spread of abnormal cells and facilitates their transformation into cancer cells.
- **Alzheimer's:** Inflammation creates conditions where the white matter surrounding nerve fiber deteriorates.
- **Heart disease:** Inflammation destabilizes cholesterol deposits in the arteries creating atherosclerosis leading to heart attacks.
- **Diabetes:** Inflammation and its complex interplay between insulin and fat create insulin exhaustion and pancreatitis.
- **Allergies:** Chronic inflammation in the lungs encourages the release of histamines that exacerbates asthma and bronchitis.
- **Arthritis:** Inflammation in the joints and other connective tissues leads to the leaching of calcium from the bones, contributing to osteoporosis and deterioration of joint capsules.

“Inflammation equals aging.” Inflammation is the reason you get wrinkles; why you forget everything from where you left your car keys to your neighbor’s first name; why you can be irritable and depressed and why you lose your health.

“Ninety-five percent of all chronic conditions are the direct or indirect result of inflammation.”

To reduce degenerative disease, it’s necessary to avoid *pro-inflammatory* foods and rely exclusively on *anti-inflammatory* foods which are usually alkaline in content. The mangosteen itself is not alkaline, but it contains organic calcium, potassium, magnesium and sodium which are. After the digestive process has begun, these alkalizing ionic minerals are released as alkalizing ash, creating a reserve from which the body can draw to help overcome system acidosis. An

alkaline system is necessary to alleviate chronic inflammation.

Most people would say, “I don’t have any inflammation!” However, if you asked them if they have any health problems they often recite a litany of conditions. “Ninety-five percent of all chronic conditions are the direct or indirect result of inflammation.” Often the cause of their inflammation is not recognized. Sugar, which Americans consume at the rate of 120 pounds per person per year, is one of the most serious contributors to inflammation. Because of our life-style and dietary choices, we all deal with inflammation.

C-reactive protein is used by the medical community as a marker for inflammation in the arteries. The higher the C-reactive protein, the more inflammation is present. To reduce C-reactive protein levels inflammation, doctors routinely advise taking aspirin, ibuprofen, Naprosyn or Aleve. If the inflammation is acute they may prescribe Vioxx, Celebrex (Cox 2 inhibitors) or Dexamathazone, a powerful anti-inflammatory that also suppresses the immune system.

Mangosteen is a *natural* Cox 2 inhibitor and a powerful *natural* anti-inflammatory that has been shown to be more powerful and potent than aspirin or Dexamathazone in reducing inflammation...**with no side effects!**

**Note:** Research shows that mangosteen has the highest Cox-2 inhibitor action of any natural source.

## **RESEARCH AND HEALTH BENEFITS**

At this time almost all studies with mangosteen have been done in a laboratory setting. There is little human research to indicate how mangosteen supplements would influence the prevention or therapy of various disease conditions. However, research does show that the xanthenes and other compounds in mangosteen have antioxidant, anti-bacterial, anti-fungal and anti-tumor activity. Laboratory testing indicates that extracts of mangosteen have activity against several cancer cell types including breast, liver, and leukemia. Mangosteen also appears to have anti-histamine and anti-inflammatory properties. Human testimonials support these laboratory findings.

Research shows that historically the inhabitants of Southeast Asia have been using the pericarp of the mangosteen for medicinal purposes for centuries. The most common and traditional uses were for:

- Inflammatory diseases.
- Diarrhea, dysentery and intestinal disorders
- Skin infections (eczema).
- Wounds.
- Bacterial and fungi infections.
- Parasites.

Proponents of the mangosteen for supplementation continue to use it for the conditions mentioned but have also found it useful for more modern “life style diseases” brought on by diet, stress, and lack of exercise. These newer uses for mangosteen include:

- Musculo-skeletal and joint problems.
- Skin conditions, eczema, psoriasis and seborrhea.
- Pain control – sciatica and radicular pain syndromes.
- Control of blood sugar and diabetics.
- Infections – viral, bacterial, and fungal.
- Mouth ulcers.
- Allergies.
- Prevention of atherosclerosis.
- Anti-aging.
- Lowers LDL cholesterol
- Poor memory and dementia.
- Anxiety, depression and stress.
- Cancer –along with standard medical therapy.

Compounds found in plants have long been of great interest to cancer researchers. It should be noted that about one-fifth of all chemotherapeutic medications were derived from plant sources. However, in order for a plant compound to become a drug and become patentable, (and thus exclusive to its creator), the chemical structure must be

altered in some way. This makes the compound different (and sometimes unsafe) when compared to the natural compounds we are talking about.

The Institute of Chinese Medicine in Taiwan studied the affect of 1 type of xanthone from mangosteen against regular chemo cancer drug effects on various cancers. Tests showed the xanthone was more effective against specific cancer tumors than the regular chemo drugs. Five other studies have shown that the additional xanthones in the mangosteen food were very effective against other types of cancer.

- In January 2004 studies in Bangkok Thailand showed that xanthones (gamma mangosteen) from the pericarp inhibited the growth of breast cancer cells.
- In Japan, Dr. Matsumoto published a study that demonstrated that six xanthones had the ability to kill leukemia cells in laboratory experiments.
- In November 2002, tests using the xanthone garcinone E, demonstrated potent cytotoxic effects on hepatocellular carcinomas (HCCs) and on gastric and lung cancer cell lines.

#### **OTHER SCIENTIFIC STUDIES:**

- Investigators found the mangosteen fruit extract strongly inhibited histamine release and prostaglandin E2 synthesis. This is great news for those suffering from allergies.
- Researchers studied the effects of twelve xanthone derived compounds on platelet aggregation (blood clotting). They found five of them inhibited thrombin-induced platelet aggregation (they inhibited clot formation).
- Research in Australia has shown that the xanthone mangostin can inhibit the oxidation of LDL, low density lipoprotein (bad cholesterol). Note: If the oxidation of LDL cholesterol can be prevented or inhibited, then the LDL-cholesterol cannot exert its negative effect and cause heart disease. This is important in preventing plaque formation & subsequent blockage of arteries & heart disease
- Mangiferin, a mangosteen xanthone, has been shown to lower the blood glucose (sugar) level in type II diabetic mice and likely exerts its anti-diabetic activity by decreasing insulin resistance
- Xanthones are powerful antimicrobial agents. They are anti-bacterial, anti-viral and anti-fungal. In March 2004 xanthones were tested against vancomycin, one of the strongest anti-microbial drugs available. This is the antibiotic that is currently being used on the anti-antibiotic “Super Bugs”. Tests revealed that the Alpha-mangostin xanthone out performed vancomycin against staphylococcus, salmonella, E-coli and Mycobacterium tuberculosis (TB).
- In a 1998 study it was found the xanthone garcinia mangostana mangostin could inhibit the replication cycle of HIV (AIDS virus).

- Studies in Japan in 2002 showed some promise for degenerative diseases such as Alzheimer's. Gamma xanthenes help stop the inflammation and degeneration of the white matter of nerves in the brain and inhibits enzyme action that causes pain in Alzheimer's, MS and fibromyalgia.
- Mangosteen has the fourth highest ORAC rating among natural foods.

In addition to its 43 xanthenes, the mangosteen also contains:

- Catechins (powerful antioxidants).
- Pollysaccharides, (long chain, complex carbohydrate glyconutrients with anti-cancer and anti-bacterial properties).
- Stilbenes (anti-fungal compounds).
- Quinones (anti-bacterial compounds).
- Vitamins B1, B2, B6, C, potassium, iron, calcium and phosphorus.

## DOSAGE

The ingredients in the mangosteen are the most potent and active within four to six hours after taking them. Therefore, the optimum would be to take the recommended dosage three times per day. It is best to take it before or with meals because some elements need to be dissolved in conjunction with the digestive process so that they will absorb better.

According to Dr. David Morton, Ph.D., children can take mangosteen. If the child is four or older they may take ½ the recommended adult dosage. If the child is younger than four they should take ¼ of the recommended adult dose. Because it is a whole food, you cannot overdose.

**“Why would anyone want to use a drug, when a food or fruit can provide the same or better result?”**

-- Dr. Frederic Templeman, M.D.

According to Dr. Frederic Templeman, M.D., “Mangosteen is a food and not a drug with the intrinsic danger inherent in all drugs. Therefore, complex human studies (randomized trials) have not been necessary to establish either safety or efficacy.”

The xanthenes and other compounds in the mangosteen fruit **SLOW DOWN** the destruction of our body's 76 Trillion cells (aging) **with no side effects**.

It should be noted that the mangosteen fruit does not cure any of the diseases or conditions mentioned. Taking the mangosteen helps to alkalize, balance, and nourish the body with whole food building blocks so that the body has a chance to rebuild and repair itself.

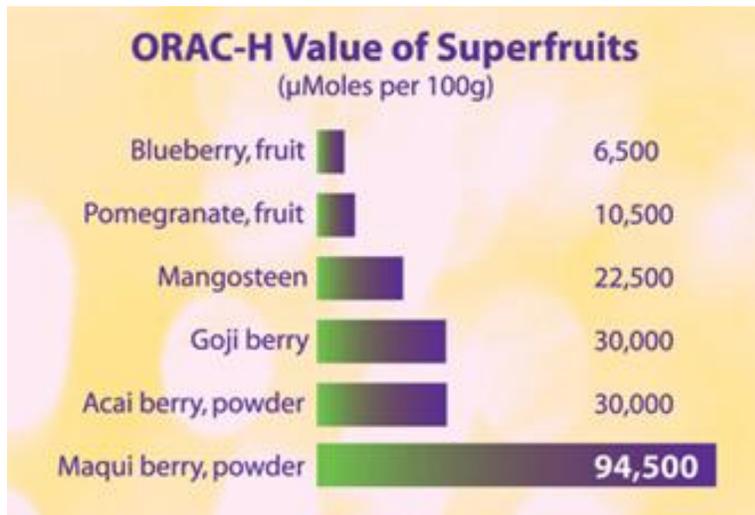
# Chapter 5: Maqui



The maqui berry, sometimes called the Patagonia Superfruit, is a purple colored fruit found in the Patagonia (Chile) region of South America. This is an area untainted by chemicals and toxins and offers perfect growing conditions. It is a staple in the diet of the Mapuche Indians, who consistently have one of the longest life spans of any ethnic group. The maqui berry seems to have an incredible blend of just about everything the body needs to help maintain good health.

The recent "discovery" of maqui by the rest of the world, is turning the study of nutrition upside down. The açai berry, which was regarded as "the most nutritious and powerful food in the world" by many authorities, now has to take a backseat to the maqui which has 3 times the anti-oxidative power to counter free radical damage.

According to an independent report (Brunswick Labs) the "**Maqui berry has the highest concentration of antioxidants and the highest concentration of anthocyanins and polyphenols of any known fruit or berry**"



The above chart shows the ORAC values for superfruits for 100 grams (100,000 mg) of powder. Rarely are supplement ingredients measured in grams it is usually in milligrams. So, to put thing in their proper perspective, **Maqui's rated ORAC value per gram (100 mg) of powder is rated the highest of any of the superfruits at 945 ORAC rating (3,780 ORAC rating for 400 mg of powder)**. The next highest is the Açai berry at 300 (1200 ORAC rating per 400 mg of powder). Incidentally, the ORAC value of the powdered form of all the berries in the Gammaqui product was generally found to be double of that found in the juice form which mainly consists of water.

The fact that the maqui berry is packed with antioxidants is primarily the reason it often contributes to weight loss. Antioxidants allow the body to rid itself of toxins. Reducing the body's toxin load is essential for weight loss which, in turn, allows us to become healthier. In a study conducted by the University of Texas in Austin, it was found that subjects taking 2 doses of maqui berry per day lost 400% more fat weight than the group that was on another superfruit product and the group that was on a controlled diet and exercise program.

Besides assisting in weight loss, another positive from the antioxidants in maqui is their assistance with promoting healthy aging and increasing overall health. As you age, your cells are more adversely affected by free radicals. The consequence is that your organs start to deteriorate. Our body's built-in defense system helps protect us from this, however, as we age, this defense system weakens. Adding antioxidants to your health regime will help prevent free radical damage and can have immeasurable long term benefits.

Additionally, as stated earlier, the Maqui berry is high in natural phytochemicals, such as anthocyanins (which help keep LDL cholesterol from oxidizing and hardening), polyphenols, delphinidin, malvidin, petunidin, cumarins, triterpenes, flavonoids and cyanidin. Maqui is also a great source of vitamin C, calcium, potassium and iron.

One of the most important findings about the maqui berry is its high anti-inflammatory (COX-2 inhibitor) properties. These anti-inflammatory effects can help the systems and organs of the body combat inflammation and degenerative conditions such as arthritis, heart disease and gastrointestinal "**itises**" (ie. gastritis, colitis). Maqui berries have also been found to be antimicrobial (it kills or inhibits the growth of bacteria, fungi and virus). Obviously, this can help support and strengthen your immune system.

The maqui berry, when combined with other superfruits or berries, seems to act as a synergistic activator. This trait can amplify the health benefits normally available from the ingredients (acai, goji, mangosteen) with which it is combined.

Essentially, the maqui berry seems to:

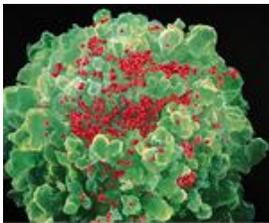
- have high antioxidant properties to fight free radical damage;
- have powerful COX-2 inhibiting (anti-inflammatory) properties;
- support the immune system;
- have antimicrobial, antiviral, antifungal properties;
- have analgesic pain relieving properties;
- have thermogenic properties that raise the body's metabolic level by burning fat;
- support healthy weight loss;
- be anti-atherogenic (helps manage healthy cholesterol and triglyceride levels);
- Inhibit LDL oxidation which is a cause of plaque build-up in arteries;
- Support cardiovascular health;
- Stimulate new cell growth to help retard old age symptoms;
- Increase and improve energy and stamina.

Regardless of your body's situation, the maqui berry can definitely provide the nutritional building blocks needed to promote a healthy functioning body.

# Chapter 6: Improving Your Health Through the Detoxification Process

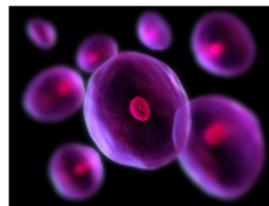
The buildup of toxins is responsible for the creation and propagation of 95% of chronic and degenerative disease conditions. Because of this factor, to become healthy, it is absolutely necessary to detoxify the body. However, before any health regime can be successful at gaining or regaining health, the body must first be able to create and maintain a healthy pH balance (slightly alkaline at approximately 7.4). Then, we must provide the body with the proper nutrients (mostly from whole foods or whole food supplements) so that it has the building blocks to replace and repair itself. Once the criteria of pH balance and nutrition have been attained, the body can begin the process of ridding itself of the built-up toxins and acid producing materials that have been stored in the liver and fatty tissue.

**Detoxify or Die**, by Dr. Sherry A. Rogers, M.D., pretty well sums it up. Hers is just the latest effort to get people to understand that if they truly want to establish a life of good health, they have to detoxify. This premise is not one that is very close to the top of the healing list of most mainstream allopathic physicians. However, detoxify, detoxify, detoxify has been the mantra of Naturopaths, Homeopaths, Holistic, Ayurvedic and most natural healers for several hundred years. The health of the body revolves around homeostatic balance, and toxins in the body upset that balance.



A Toxic Unhealthy Cell

The body does its best to maintain a homeostatic balance so that all the systems and organs function at their optimum level. However, because of diet, chronic disease, injury, and stressful lifestyles, we gradually move the body out of balance. This results in the accumulation of acids and poisons (toxins) in the fat, tissues, and organs (especially the liver) of the body. Disease thrives in this type of acidic environment. Therefore, in order to regain homeostasis and maintain optimal health, the body must rid itself of these harmful substances which it has stored. When you have a good nutritional program in place and are taking effective nutraceutical supplements that alkalize, balance, nourish, and help cleanse the body, such as the Gammaqui product from LifesMiracle. This process of toxic/acidic cleansing is called detoxification.



Toxin-free Healthy Cells

Detoxification is the body's normal process of eliminating or neutralizing toxins through the colon, liver, kidneys, lungs, lymph and skin. Normally, detoxification is an automatic function our body performs daily. But, in today's modern world, our body and organs are overloaded with toxins and a body that is out of balance cannot properly get rid of them. Therefore, they continue to build up until we can no longer eliminate or neutralize them. Our body tries to protect us from the dangerous, sometimes life threatening reaction of these toxic substances by surrounding them with mucus or fat, thereby isolating them so that they

won't cause a pH imbalance or cause a health reaction. However, in order to regain health we must reverse this process...DETOXIFICATION.

During the first phase of detoxification (called catabolism), the emphasis is on the cleansing of tissues and the elimination of toxins. The body begins to "clean house." This consists of removing the metabolic and toxic garbage deposited in all the tissues. The body says to itself, "Now we have a chance to get rid of this old garbage and build a healthy new body. Let's get this excess bile out of the liver and gall bladder and send it to the intestines for elimination. Let's get the sludge moving out of the arteries, veins, and capillaries. These acid produced arthritic deposits in the joints need alkalizing and cleaning-up. Let's get these irritating food preservatives, aspirins, sleeping pills, and drugs out of the body."

This stage can last hours, days, or even up to several weeks for those who are highly toxic. During catabolism, wastes are discarded more rapidly than new tissue is made. Energy from the muscles and skin begins to move into the internal organs to start regeneration. This shunting of much of the body's power to the internal region produces a feeling of weakness and less energy in the muscles. Actually, your vital energy is increasing. However, most of it is being used for cleansing and rebuilding the internal tissues and organs therefore, less of it is available for muscular work. Any weakness which is felt at this time is not true weakness but merely a redeploying of forces. During catabolism it is important for the person to stop wasting energy and to rest and sleep more. If the person resorts to stimulants of any kind, he will reverse and defeat the regenerative intent of the body.

Occasionally an individual may experience "flu-like" symptoms during this stage and want to quit. DON'T! That person may need to slow down the detox process, but don't give up. A person must give his body a chance to adjust and complete this first phase of action. It is important to have patience and faith and just wait it out. The end result will be increased strength, health, and well-being.

Success in recovery or improvement of health hinges upon the correct understanding of this important healing concept: The body is using its main energies in more important internal work and not wasting it in external work involving muscle movements. Be wise, take it easy, and relax. Naturally speaking, the body heals itself from the top down and from the inside out.

The second phase of detoxification is called stabilization. This is a "resting time" when the body remains more or less stable. The amount of toxic waste material being discarded daily is equal to the amount of tissue which is being formed and replaced. Stabilization occurs only after the excess of toxins and other deteriorating material in the tissues has been removed.

The third phase is a building period called anabolism. At this point, new tissues are rapidly being formed. The higher the percentage of natural and raw food one consumes and the purer, more alkalizing, and more nourishing the supplements taken are, the quicker one advances into this third phase. It is during this phase that the body is

alkalizing the tissues and fluids of the body and realigning its energies to bring the body back into homeostatic balance.

It is extremely important to understand how the detoxification process can physically manifest itself. At the beginning of the cleansing process, headaches may occur, fever and/or colds may appear, the skin may break out, and there may be a short interval of bowel sluggishness. You may experience nausea, occasional diarrhea, feelings of tiredness and weakness, disinterest in exercise, nervousness, irritability, negativity or mental depression, and frequent urination. The symptoms you experience during detoxification will vary according to the toxins being discarded, the conditions of the organs involved in the elimination, and the amount of energy you have available.

Those who have practiced healthy lifestyles and eaten healthy foods will have reactions ranging from almost none at all to very mild symptoms which may be slightly uncomfortable. Those who have had less healthy habits and have ingested more poisons will experience more severe symptoms, particularly if their liver, kidneys, or other important eliminating organs have been damaged. When the symptoms are present, the more you rest, sleep, and drink plenty of good alkalized water, the milder they will be, and the more quickly they will end.

People going through detox often ask, "How come I don't feel wonderful? I'm eating better now than I ever did before, and instead of improving, I'm getting worse." They don't understand that the body is naturally cleansing and rebuilding. Though unpleasant at the moment, these actions are constructive. This is nature's way of housecleaning and is part of the curing process. Don't try to stop these symptoms by the use of certain drugs or even massive doses of vitamins which can often act as drugs when consumed in huge concentrations. **DON'T TRY TO CURE THE CURE.** The great majority of people find their reactions tolerable and are encouraged to bear with them because of the improvements to their health. Be happy you are having symptoms! Your body is becoming younger and healthier every day because you are throwing off more and more toxic wastes.

By eliminating the old built-up toxins, you are saving yourself from more serious disease conditions which may result if you keep the toxins in your body. (Diseases such as hepatitis, gastrointestinal disorders, kidney disorders, blood disease, heart disease, arthritis, nerve degeneration, and cancer are associated with an acidic/toxin stressed body).

Don't expect to feel better and better each day until you reach perfection. The body regenerates in stages, and health returns in a series of gradual steps. In some individuals these stages happen quickly; for others, it can be slower. For example, let's say you have some form of chronic disease so you start a detoxification program and begin taking nutritional supplements. For a while, you feel much better. But, after a time, a detox symptom occurs. You may have a skin rash, feel nauseous, and have diarrhea with foul-smelling stools. After a few days, you feel better than before. Then, you suddenly develop a cold, feel chills, and lose your appetite. After two or three days (assuming you don't take drugs or do anything else about it), you recover and feel better than you have for years.

And so it goes, each reaction being milder than the last as the body becomes healthier. Each health crisis becomes shorter in duration and is followed by a longer period of feeling better than ever before until you have achieved homeostatic balance. When you reach a state of high alkalinity and balanced health, you become relatively disease-free. You did not reach your level of deteriorated health overnight, and there are no “silver bullet” cures that will immediately return you to good health. However, you will be pleasantly amazed at how quickly you can recover your health if you:

- Follow a sound nutritional program.
- Follow a physical detoxifying regime such as using an infrared sauna.
- Realize that your body will be going through a HEALING detoxification process.
- Take the necessary nutritional supplements that will alkalize, cleanse, balance and nourish your body. We suggest taking a whole food supplement, like the Gammaqui, containing the Goji, Açai, Mangosteen and Maqui berries to accomplish your detoxification.

Your ultimate goal is to reach and maintain homeostasis within your body as well as in your life. Remember, the key word in the detoxification process is; **patience, patience, patience!**



## Chapter 7: RECOMMENDATIONS

Paper or Plastic? Organic, Synthetic or Altered? There is a crucial difference in how they affect your health and longevity.

This organic, synthetic or altered dilemma forces us to make decisions in many areas of our lives, not just in which type of bag we wish to carry our food home. To the health conscious person the choice of organic, synthetic or altered should be absolutely clear.

The U.S. Surgeon General has reported that 68 percent of all disease is diet related. Yet the food available for purchase in our grocery stores is lacking the nutrients we need for our bodies to function normally. U.S. Senate Document 264 reports that the soils in which most of our foods are grown are depleted in nutrients and minerals. Additional studies reveal that there are 10% less natural nutrients (mostly minerals) in our foods than there were 10 years ago. In order to offset this nutritional deficiency problem the Surgeon General has recommended that everyone should be taking supplemental vitamins and minerals. Which brings us back to -- “organic, synthetic or altered supplement sources?”

The supplements that are usually offered in pharmacies or “big box” stores, as a general rule, are not from natural food sources or are created from genetically altered sources. Unfortunately, this is where most people purchase their supplements, usually because of cost factors. Supplements containing synthetic ingredients often have amounts that are far below what the body actually needs to remain healthy. In addition, the body processes synthetic vitamins differently than it does organic.

**Note:** The most expensive supplements are those that do not work!

The best answer, to obtaining our essential nutrients, would be to only eat non-genetically altered organic whole foods that have been grown in mineral rich soil and prepared fresh without cooking over 180°, microwaving, freezing, irradiating, radiating, preserving, etc. However, cost factors, convenience, habit, lack of nutritional education, lack of availability and just plain laziness prevent this from happening.

The lack of nutrients in our high stress fast food lifestyle is a major contributing factor in the development of chronic degenerative disease that is plaguing our world today.

The combined synergistic nutritional power of GOJI, ACAI, MANGOSTEEN and MAQUI creates an unequalled source of whole food and nutrient rich ingredients to provide the body what it needs to build a strong immune system and to provide your body with the tools it needs obtain and maintain optimal health.

# Chapter 8: AUTHOR'S COMMENTS

## **Dr. Jeff Bennert Ph.D., C.T.N.**

I am in good condition and health, and have a lot of energy. Therefore, when I started taking the Gammaqui combination of Goji, Açai, Mangosteen and Maqui Superfruits I didn't know what to expect. However, I was extremely impressed and excited at the increase in concentration, focus, energy, stamina and endurance and the fact that I am sleeping better.

## **Kurt Grange Ph.D., N.D., Nutritional Biophysicologist.**

We have received many testimonials about Gammaqui and its positive effect on people's lives. But, the best health reversal occurred with my wife Nancy. A couple of years ago she noticed a great deal of swelling in her left ankle, diagnosed as a localized viral infection. At first it was just annoying. But the chronic inflammation problem created a dangerous condition. As she lost strength and flexibility in that ankle, she would stumble or fall when the ankle unexpectedly gave way. After taking the combination of Goji, Açai, mangosteen and Maqui her ankle is normal in size, no inflammation with restored strength and flexibility. No more clutching stair handrails or stumbling as she steps off a curb. Swimming, hiking and playing with the grandkids are again normal activities for her.

We are convinced that you should only use products that contain the highest grade and purest ingredients. The "Superfruits" in the Gammaqui product we recommend are wild-harvested and freeze dried to insure purity and freshness. There are no preservatives or fillers.

There are few companies which are truly respected for their research and development of life changing whole food nutraceutical products. There are fewer companies still that have the integrity, the professional leadership and the foresight to bring these products to the general population in a form that is highly bioavailable and bioabsorbable. LifesMiracle producer of Gammaqui is one of those companies.

The body is designed to function best on a diet of whole foods. The more whole foods and whole food extracts we can put into the body, the better the body performs. The Gammaqui product has a proven track record for improving health. The company, LifesMiracle, only uses the purest ingredients, and the amount of ingredient in the product is more than sufficient to accomplish the positive health change for which you are taking the product in the first place.

**When you have a product which has four powerful, all natural, extensively researched, health enhancing whole food ingredients, that have proven they work, why wouldn't you want to include it in your health program?**

The reports and research documents available on the healing superfruit compounds contained in Gammaqui are numerous and readily available on the Internet. Please do yourself a favor and take the time to educate yourself about them. We have heard of stories of great relief from symptoms of stress, fibromyalgia, allergies, swelling, inflammation, BPH (benign prostate hyperplasia), arthritic pain, etc., and a host of other ailments. Taking Gammaqui daily in would be a perfect addition to your health regime to alkalize, nourish, balance and detoxify your body so that you can enjoy a healthy life style.

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