INTRODUCING CIT THERAPY™

Calcium Ion Therapy based on CIT Formulation Technology*

*Proprietary technology of CBHI, Canada

DOCOFDETOX

PRESENTING NEW & INNOVATIVE

CALCIUM ION THERAPY

INTRODUCTION TO **CIT THERAPY**

CIT (Calcium Ion Therapy) is the only true ionic calcium delivery system that provides calcium in free ionic state, which is the only physiologically active form of calcium in our body. Normally, calcium from diet and supplements enters our body in the protein-bound form and therefore, cannot trigger the same physiological responses as CIT. Resolving calcium deficiency better than protein-bound calcium, CIT triggers ionic-calcium-sensitive physiological responses that counteract the root cause of diseases and brings natural healing reactions of our body from cellular to the systemic level.

The purpose of this booklet is to introduce the underlying technology of CIT and the principles behind the new and safe therapy based on CIT technology and to invite interested physicians to partake in our global clinical trial program for their consenting patients. CIT Calcium Ion Therapy is also recommended as a part of a more comprehensive treatment plan of participating physicians in treating infectious and degenerative diseases.

CIT Calcium Ion Therapy utilizes CIT-infused products from Doc of Detox and is gaining more recognition as the therapy undergoes a decade-long clinical evaluation by participating researchers and doctors.

TREATMENT GOALS OF **CIT THERAPY**

Because of the role ionic calcium plays in communication as a cellular signaling agent, neurotransmitter, and second messenger, our body has mechanisms to precisely regulate the concentration of ionic calcium in the blood, extracellular spaces, and intracellular spaces. With aging, poor nutrition, unhealthy lifestyle, and accumulation of toxins from food and the environment, the delicate balance of calcium homeostasis starts to tip over, causing both cellular and systemic communications breakdowns, which in turn triggers the onset of a host of degenerative diseases.

CIT is a nutritional supplement providing calcium in a physiologically active ionic form, which is utilized directly by our body without the need to convert it from the default protein-bound form in our body. CIT therapy's unique healing pathway triggers our body's natural calcium-sensitive responses that help to restore the delicate balance of calcium homeostasis, leading to normalizing cellular communication, restoring mitochondrial functions, and reducing oxidative stress.

Healthy cells lead to healthy tissue, organs, and systems, and the cells-to-systems overhaul by CIT is how the therapy helps to reverse degenerative diseases and naturally improves the quality of life, all without side effects.

MANAGING EXPECTATIONS OF **CIT THERAPY**

CIT is not a targeted therapy that only focuses on the relief from the symptoms of the disease. Instead, CIT is a systemic therapy that focuses on treating the root causes of the disease at the cellular level. Therefore, sometimes it may take longer to clinically experience the positive effects of CIT therapy compared to symptom-targeted treatments. Once the physiological momentum takes root to reverse the disease, the recovery often accelerates with results that are far better compared to the therapies that only focus on relief from symptoms.

Restoration of calcium homeostasis at cellular level restores mitochondrial functions, reduces oxidative stress, eases inflammations, and corrects cellular communication signaling errors. From healthy cells to healthy tissues to healthy organs to healthy systems, CIT helps to rebuild our entire body. CIT therapy helps to address systemic issues and overcome the disease; however, both time and patience are required from patients to experience the benefits of CIT therapy. The anticipated rate of success of CIT therapy depends on several variables, including the patient's medical history, ability to heal, and proper dosage strength; hence CIT products are not sold on shelves but distributed only through practicing medical practitioners who could provide patient consultation.

DISCLAIMER

Doc of Detox hereby makes no medical claims to treat or cure any diseases. CIT products are registered as dietary supplements, and the health benefits of CIT are as a result of our body's natural response to addressing ionic calcium deficiency through supplementation. Simply put, CIT therapy is a nutritional therapy based on ionic calcium.

The company makes only one scientific claim that CIT (Calcium Ion Therapy) infused products when taken orally deliver calcium in ionic form, which in turn triggers natural and healthy physiological responses. Utilizing these physiological reactions in treating diseases at any capacity is solely at the discretion of participating physicians, and dosing recommendations serve only as a guideline which is produced based on the compilation of results from participating physicians.

Doc of Detox distributes CIT applied products only through licensed physicians, clinics, and health care practitioners, and the use of CIT-infused products for patients is solely the responsibility of participating practitioners and consenting patients. Doc of Detox, as a company, does not treat patients directly nor offer any health advice. Patients are to follow the recommendations of their physicians only, and the materials provided in this booklet is for education purpose only.

THE CALCIUM DILEMMA **WE ALL FACE**

A survey of 13 space station astronauts found that their bone strength dipped by at least 14% on the average during their half-year stays aboard the orbiting laboratory. Three of the astronauts lost up to 30% of their bone strength during their spaceflights despite the most advanced and nutritionally balanced diet. Reason? In space, there is no gravity that stimulates bone turnover to utilize the calcium from the diet, which has to be converted from its protein-bound form to the ionic form (Ca^{2+}) for use.

Since our body can only use ionic calcium for all physiological functions, the astronauts' body has no choice but to release critically required ionic calcium from their bones. Though they were on calcium-rich diets, such protein-bound calcium from the food was unusable for the body's required needs and therefore is excreted. This is the calcium dilemma.

Similar effects happen to the rest of us as we age who tend to be more sedentary with a minimum challenge to our bones. Combined with stress, age-related hormonal changes, accumulation of toxins, and unhealthy diet and lifestyle, deteriorating bone health is inevitable despite sufficient calcium intake. This is 'perceived' calcium deficiency. Unlike vitamin deficiency which is resolved with simple supplementations, calcium supplementation, on the contrary, often leads to more calcification than addressing the deficiency.

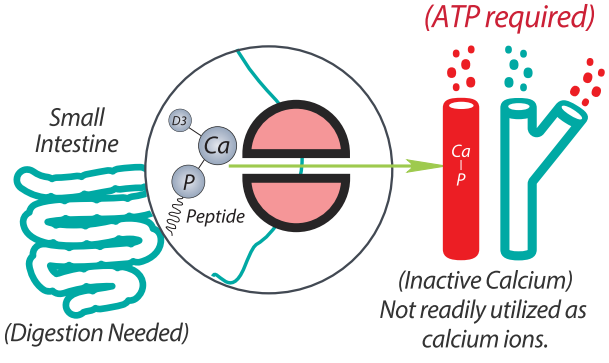
CALCIUM RELATED DISEASES

Calcium is stored in our large bony reservoirs as well as in cellular reservoirs, namely mitochondria and endoplasmic reticulum, ready to be utilized instantly to maintain the precise levels of ionic calcium both intracellularly and extracellularly to regulate its role in cellular communications.

However, as we age, too much calcium leaves the bony reservoirs and gets accumulated in cellular reservoirs, causing calcium deficiency in the bones (osteoporosis) while overloading cellular reservoirs. This causes major cellular communication breakdown by disrupting crucial calcium-signaling, which directs most cellular processes, and sets the stage for degenerative diseases.

TYPICAL CALCIUM ABSORPTION AS PROTEIN-BOUND CALCIUM

(Requires vitamin D & peptides)



CALCIUM SUPPLEMENTS: **TAKE THEM OR NOT?**

SIDE EFFECTS:

1. ABSORBED AS INACTIVE FORM

Absorbed as physiologically inactive protein-bound form and not well utilized with age.

2. SIDE EFFECTS

Acid rebound, kidney damage, vascular calcification, systemic inflammation, and mineral imbalance.

A German study found a significantly increased risk of heart attack among women taking calcium supplements. (June 2012, Heart)

DAMAGING EFFECTS OF **CALCIUM SUPPLEMENTATION**

For decades people are misinformed that we can prevent bone loss by putting more calcium in our body. More recent studies have not only confirmed the ineffectiveness of calcium supplementation in regard to bone protection but also warned against the elevated risk of a heart attack due to vascular calcification. This calcium displacement also happens in soft tissues, joints, and even intracellular spaces. According to Dr. Thomas Levy, the author of "Death by Calcium," calcification is the leading cause of chronic degenerative diseases. In fact, it is the loss of calcium from our bony reservoirs that triggers body-wide calcification together with unused protein-calcium.

Calcium is the most difficult and misunderstood nutrient because unlike other nutrients, simply supplementing calcium does not resolve the deficiency nor protect against thinning bones. Hence, more and more orthomolecular doctors advise their patients not to take calcium supplements for fear of calcification that may pose greater health risk than fractures. A healthy diet and an active lifestyle may help slow down bone loss. Still, no supplements and drugs were proven effective in reversing bone loss and clear the calcium displacement (calcification), which is suspected to be one of the primary causes of aging and degenerative diseases, even cancer.

A logical solution to all these calcium issues is providing calcium in its physiologically-active ionic form instead of protein-bound form. Calcium in ionic form triggers bone-building osteoblasts to rebuild thinning bones and at the same time clear systemic calcium displacement.

CAUSES OF AGE RELATED BONE LOSS:

- Sedentary Lifestyle
- Lower Sex Hormones
- Lower Osteocalcin
- Lower hGH
- Lower Calmodulin
- Menopause

RE-ESTABLISHING **CALCIUM HOMEOSTASIS** IN TREATING **CALCIUM RELATED DISEASES**

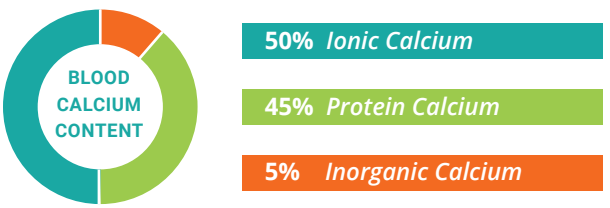
Without ionic calcium, heart and muscles cannot contract, cells cannot multiply accurately, enzymes and hormones cannot function correctly, and our neurological functions will stop. Therefore, when the ionic calcium level runs low, our body must provide it immediately from the bone, or else we die.

Also, no other mineral concentration is more precisely regulated than calcium ions. Why? Because calcium oscillation and signaling serve as the most basic communications medium upon which subsequent processes of communications take place. For proper signaling, precise Ca^{2+} concentration is needed.

However, with aging that involves gradual bone loss and resulting systemic whole body calcification, this precisely regulated calcium homeostasis is disrupted, causing many cellular functions to become erratic, even leading to mutations. Hence, preventing bone loss and subsequent calcification is crucial in preventing and treating more than 150 degenerative diseases that are thought to be connected to the aforementioned calcium issues. Both can be achieved through ionic calcium therapy.

ONLY CIT PROVIDES CALCIUM IN **IONIC FORM**

Our blood has 50% of serum calcium already in ionic form, and increasing it by 1-2% by CIT triggers the bone formation process (osteoblast) and in the process, restores calcium homeostasis. Ionic calcium (Ca^{2+}) is the only physiologically active form that can trigger such processes for therapeutic purposes.

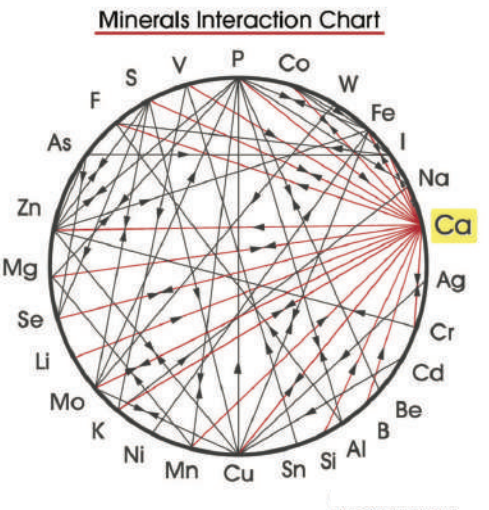


FUNCTIONS OF IONIC CALCIUM IN THE BODY

- Muscle and heart contraction
- Bone and teeth / Blood clotting
- Stem cell regulation
- Neurotransmitter / Second messenger
- Hormone secretion / Enzyme activation
- Immune system / Cell membrane stability
- Cell functions and DNA replication

CALCIUM-MINERAL INTERACTION

Calcium plays a significant and leading role in regulating other mineral's functions in our bodies. Having ionic-calcium deficiency disrupts proper physiological functions involving these minerals.



All chronic degenerative diseases feature increased extracellular and intracellular levels of calcium. Calcium deposition often results in the extracellular space, where calcium concentrations are vastly higher than inside the cells.

Increased extracellular calcium always leads to increased intracellular calcium, which always results in increased intracellular oxidative stress."

- Dr. Thomas Levy

DYSREGULATION OF **CALCIUM SIGNALS** LEADS TO **DISEASES**

"A wide range of Ca^{2+} signaling systems deliver the spatial and temporal Ca^{2+} signals necessary to control the specific functions of different cell types, and ongoing transcriptional processes need to maintain the integrity and stability of these cell-specific signaling systems.

However, these homeostatic systems are highly plastic and can undergo a process of phenotypic remodeling... resulting in the Ca^{2+} signals being set either too high or too low.

Such subtle dysregulation of Ca^{2+} signals has been linked to some of the major diseases in humans, such as cardiac disease, schizophrenia, bipolar disorder, and Alzheimer's disease."

Calcium signaling Remodelling and Disease, Michael J. Berridge, Biochemical Society TranAICtions, Mar 21, 2012,

PRESENTING NEW & INNOVATIVE

ANTIORBITAL IONIC CALCIUM

INVENTION OF NEW CALCIUM CARBONATE

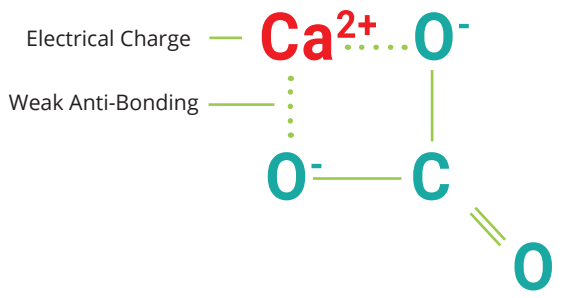
Antiorbital Ionic Calcium (AIC-$CaCO_3$)

AIC is the world's first calcium-ion-delivery-system, which safely and effectively elevates the level of calcium-ion concentration in our blood. By utilizing a very weak chemical bonding, namely Antiorbital Ionic, to calcium carbonate molecules, Calcium & Bone Health Institute of Canada (CBHI) invented new calcium carbonate, which maintains loosely held calcium ion to its carbonate group. The antibonding makes the molecules exhibit electrical charge and attract water molecules via hydrogen bonding. Making Antiorbital Ionic stable at room temperature was, in itself, a technological breakthrough after ten years of R&D.

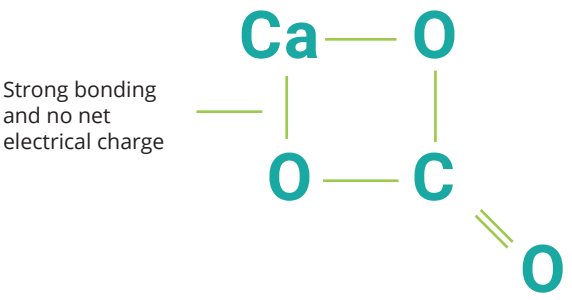
Because of the weak chemical bonding of CIT, calcium ion is easily detached and passively absorbed into our system through stomach lining as ions via diffusion and osmotic pressure, not requiring digestion, vitamin D, nor peptides for absorption. This is called passive transport.

Because of our body's natural sensitivity to fluctuations of serum plasma ionic calcium level, a minimal elevation of ionic calcium concentration achieved by CIT can trigger hormonal responses, such as the release of TSH and calcitonin to trigger bone-building osteoblasts. CIT therapy utilizes ionic calcium as a signaling agent to trigger our body's self-healing responses to reverse calcification from cellular to systemic level, causing domino effects of healing processes to rebuild our health. CIT's healing pathway is genuinely unique.

CIT CALCIUM CARBONATE



REGULAR CALCIUM CARBONATE

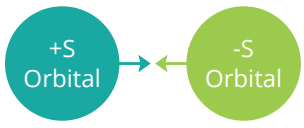


WHAT IS ANTIORBITAL MEAN?

Antiorbital is a short form of Anti-bonding orbitals which are essentially the "opposite" of bonding orbitals. They are formed when atomic orbitals combine in ways that lead to predominantly destructive interference.

The key feature of anti-bonding orbitals is that the molecular orbitals have higher energy than the corresponding atomic orbitals. Thus the molecule has higher energy than the separated atoms (atoms separated by a large distance), and the atoms would prefer to be in the lower energy atomic state. For this reason, we rarely find molecules in nature that have Antiorbital chemical bonding stabilized.

CBHI's innovative technology made this very unstable bonding stable at room temperature for CIT, allowing it to be the world's first true ionic-calcium-deliver-system.



S-ORBITALS

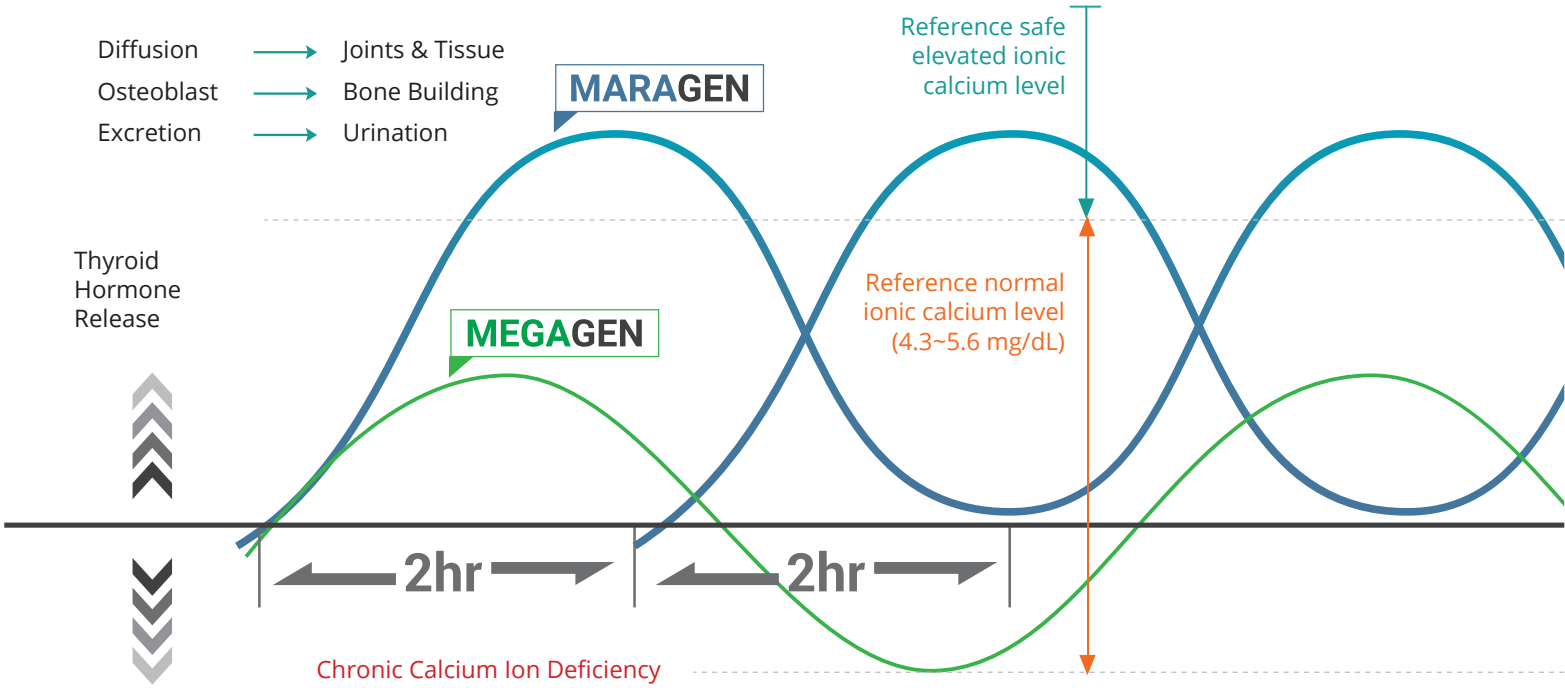
Destructive Interference (out of phase)

σ* antibonding orbital

PHYSIOLOGICAL EFFECTS OF CIT

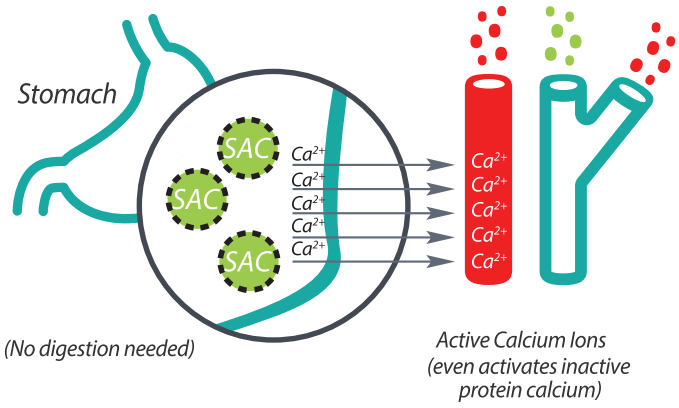
After intake, CIT's effect lasts about four hours in our body, initially raising the serum ionic calcium concentration to a higher yet safe level to trigger various physiological functions before bringing down the serum ionic calcium concentration down to the average physiological level.

While ionic calcium level is elevated, bone-building osteoblast with osteoclastic activity is triggered to raise the bone turnover rate, repairing and rebuilding bones. This process also activates idle protein-bound calcium, releasing both ionic calcium and protein, further fueling bone-building and clearing body-wide calcification. Ionic calcium also aids cellular metabolism, releasing more ATP (adenosine triphosphate) and raising body temperature. As kidneys try to excrete excess ionic calcium through urination, an urge to urinate within an hour of taking CIT is experienced, which is both healthy and normal, indicating that CIT is working.



Para Thyroid Hormone (PTH)
& PTHrP Hormone (Cancer Cell) Release

Passive Transport *(Direct absorption with water)*

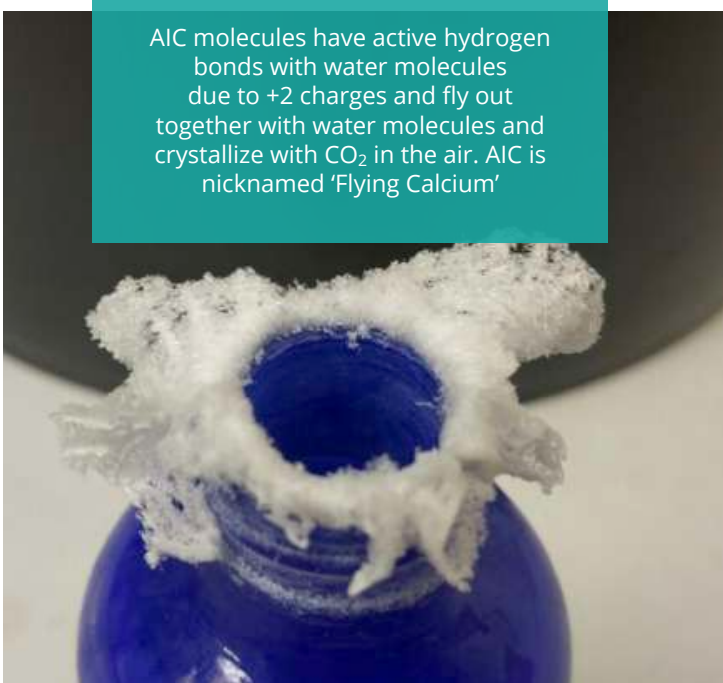


(No digestion needed)

Active Calcium Ions (even activates inactive protein calcium)

UNIQUE PHYSICAL PROPERTY OF AIC

AIC molecules have active hydrogen bonds with water molecules due to +2 charges and fly out together with water molecules and crystallize with CO_2 in the air. AIC is nicknamed 'Flying Calcium'

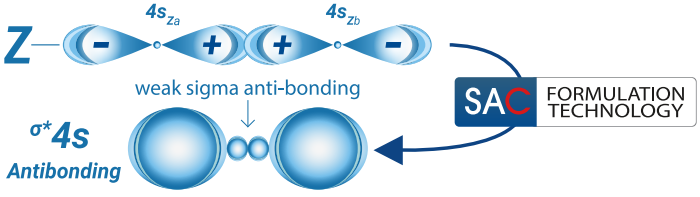


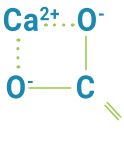
CIT CALCIUM INTAKE AS
IONIC CALCIUM

VS

REGULAR CALCIUM INTAKE AS
PROTEIN CALCIUM

CIT Calcium Carbonate

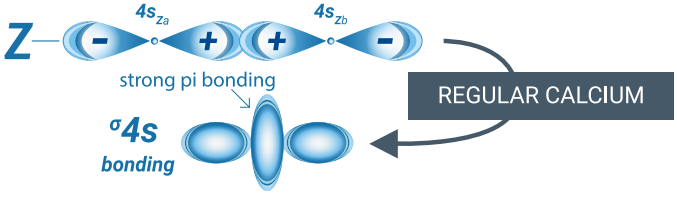


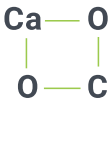


$2Ca^{2+}CO_3 \rightleftharpoons 2Ca^{2+} + O_2 + 2CO_2$

*Ksp = 7.5×10^{-7} to 8.7×10^{-7} at 25 °C

Regular Calcium Carbonate





$CaCO_3 \rightleftharpoons Ca^{2+} + CO_3^{2-}$

*Ksp = 3.7×10^{-9} to 8.7×10^{-9} at 25 °C

The weak Antiorbital Ionic (CIT) easily releases calcium ions for direct ionic absorption, also making CIT 200x more soluble and 3x faster in chemical reactions compared to regular calcium carbonate.

Passive Transport for CIT

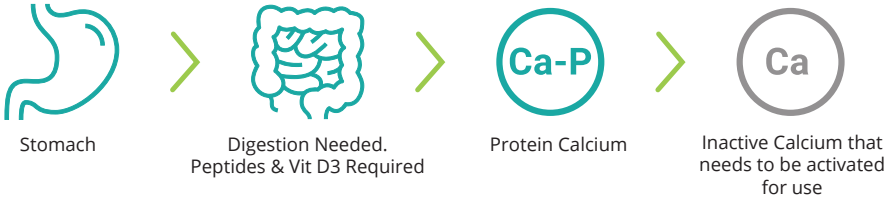
Unlike regular calcium intake, no Vitamin D3 and peptides are needed for absorption. CIT diffuses passively through digestive tract cell linings (mucosa) as ions, not requiring physiological energy from our body and readily available for immediate use.

IONIC CALCIUM IS IMMEDIATELY UTILIZED TO BRING CALCIUM HOMEOSTASIS :

Corrects calcium signaling | Reduces cellular oxidative stress | Restores mitochondrial function | Triggers decalcification

Active Transport for Regular Calcium

Regular calcium intake from diet or supplements need strong stomach acid with peptides and vitamin D3 to digest and be absorbed as protein calcium, which is not readily utilized with aging. Various side effects of inactive calcium include kidney stones, blood vessel calcification, stroke, heart attack, etc.

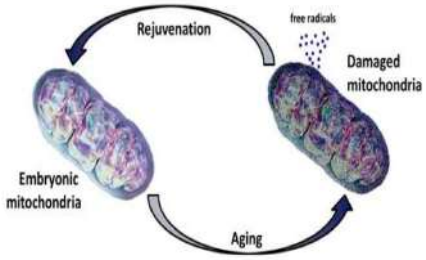


THE WINNER : CIT CALCIUM

1. Only CIT provides physiologically active calcium that activates inactive calcium for full calcium utilization.
2. Only CIT clears displaced calcium and brings it back to where it belongs, our bones, as it brings body-wide decalcification.
3. Only CIT triggers amazing therapeutic effects from the cellular to the systemic level.
4. Only CIT regulates body pH to ideal 7.4, which enhances oxygen delivery, inhibits pathogen spread, and eases inflammations.
5. Only CIT is the true ionic calcium delivery system. Unique without competition.

MITOCHONDRIAL FREE-RADICAL THEORY

A large accumulation of calcium ion inside of mitochondrial membranes induces the over production of Reactive Oxygen Species (ROS), which causes damage to DNA, RNA, and proteins, which results in cell mutation, being the main driving force of aging and cancer. Mitochondrial damage also forces cells to undergo fermentation, which upregulates genes to support fermentation, a leading step towards cancer.



Restoring cellular calcium homeostasis, which is achieved through CIT Therapy, reduces the cause of ROS production by eliminating excess calcium ions from mitochondria and rejuvenating our cellular powerhouse.

STRONGER BONES LEAD TO A HEALTHIER LIFE

- A long term, follow up study done in Denmark for 35,000 people revealed that the people with strong bones in their 50's lived 11.6 years longer.
- YET, in Canada, 49% of infants are born with calcium deficiency. Only 70% recover after breastfeeding. Calcium deficiency during pregnancy and infancy leads to serious health issues.

BONE LOSS LEADS TO 150+ DEGENERATIVE DISEASES

Bone health is directly related to our overall health. Emptier bone characterized by osteoporosis or osteopenia indicates not only a higher risk of fracture but also a greater chance of developing degenerative diseases. Why? Because emptying bones cause calcification in both cellular and systemic levels, causing cellular communications mayhem by disrupting calcium signaling.

BONE LOSS FROM AGE ~35 » **CELLULAR CALCIFICATION** » **DEGENERATIVE DISEASES**

Bone density reaches a peak around age 30 and starts to decrease around age 35. Women with menopause have a sharper decline than men, posing a higher risk of osteoporosis. Stress, a sedentary lifestyle, and toxins accelerate the drop.

Mitochondrial Dysfunction
Cellular Inflammation
Oxidative Stress
Calcium Signaling Breakdown

Chronic Inflammation
Autoimmune Response

CALCIFICATION LEADS TO DEGENERATIVE DISEASES

A	**Perceived Ca^{2+} Deficiency**	**PTH led bone resorption**	**Calcification,cellular signaling breakdown**	**Degenerative Diseases**
B	**Good calcium diets with magnesium, vitamin D, K, exercises**	**Less PTH led bone resorption**	**Utilizes more protein calcium**	**Good health benefits, but still loses BMD slowly**
C	**AIC Therapy**	**TH led bone building**	**Balanced calcium homeostasis**	**Decalcification, Reversing Diseases**

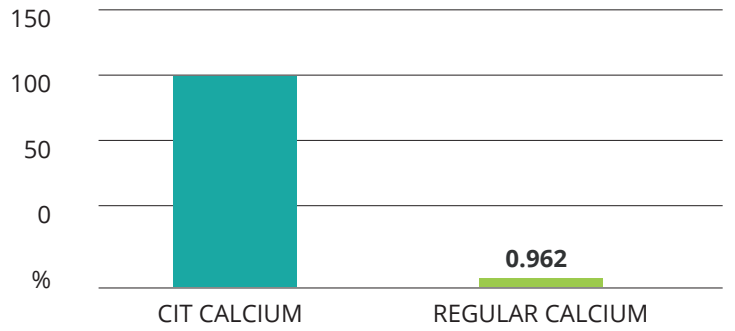
CATEGORY A Most people fall under this category. With aging, parathyroid hormone (PTH) becomes more active and takes out more calcium ion from bones than needed and causes weaker bones and whole body calcification.

CATEGORY B More health-conscious people. Slow aging with a healthy diet and bone-challenging exercises that keeps bones strong, leading to less calcification. The onset of calcium-related degenerative diseases is delayed.

CATEGORY C With AIC therapy, thyroid hormone (TH) led bone-building restores calcium homeostasis and leads to whole body decalcification, which helps to reverse calcium-related degenerative diseases.

BONE DENSITY CLINICAL RESULT PROVED 100X EFFICACY

Bone Mineral Density (BMD) | 1 ppm taken daily for 9 weeks



CLINICAL TRIAL RESULT

	Dose Conc.	BMD*
CIT Calcium	0.0001%	102.2
Regular Calcium	0.01%	96.2

CIT AND BONE METABOLISM INDEX IN ANIMAL TRIAL

Osteoporosis was completely reversed with CIT Therapy. Osteocalcin, estradiol, eosinophil, CTx, BMD levels were all elevated with CIT Therapy.

	Estradiol (pg/mL)	Osteocalcin (ng/mL)	C-terminal telopeptide (ng/mL)	BMD
Control	4.536±0.343 ^{a}	3.398±0.294 ^{a}	4.751±0.244 ^{a}	0.2276±0.011 ^{a}
OVX	3.920±0.277 ^{a}	4.047±0.501 ^{bb}	5.082±0.462 ^{ab}	0.1965±0.012 ^{b}
OVX + AIC	4.217±0.247 ^{a}	3.558±0.154 ^{ac}	4.360±0.495 ^{a}	0.2276±0.012 ^{a}

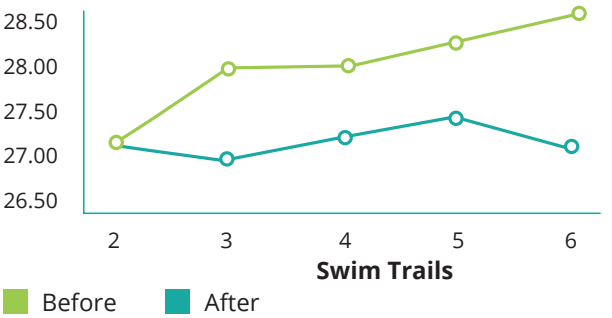
Effects of Antiorbital Ionic Molecule Calcium Carbonate on bone turnover and calcium balance in ovariectomized rats. Values are mean ± SD for 5 rats. Means with different superscript letters are significantly different at $p<0.05$ by Duncan's multiple range tests. **Control:** sham operation **OVX:** no treatment after ovariectomy **OVX+AIC:** AIC Therapy after ovariectomy. *(Lab Anim Res 2011: 27(4), 301-307, 2011)*

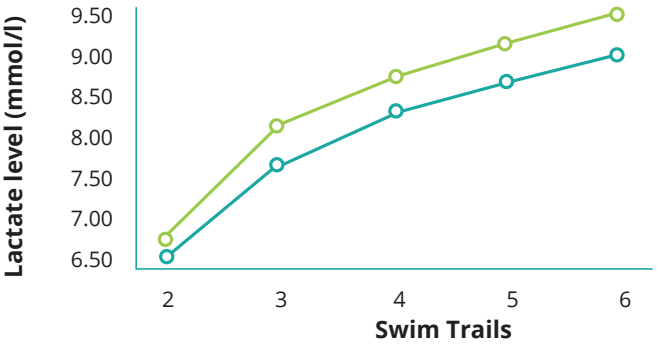
LACTIC ACID REDUCTION CLINICAL CASES

Twenty swimmers from Korea University swim team taking two doses a day for 14 days proved that CIT neutralizes lactic acid effectively. They all broke their swimming records as a result.

Lactic acid, which is the byproduct of carcinoma cancer cells, is known to inhibit the immune functions around cancer tumors. Neutralizing the lactic acid and bringing pH back to a normal level is crucial in cancer treatment.

Swim Record (Sec)

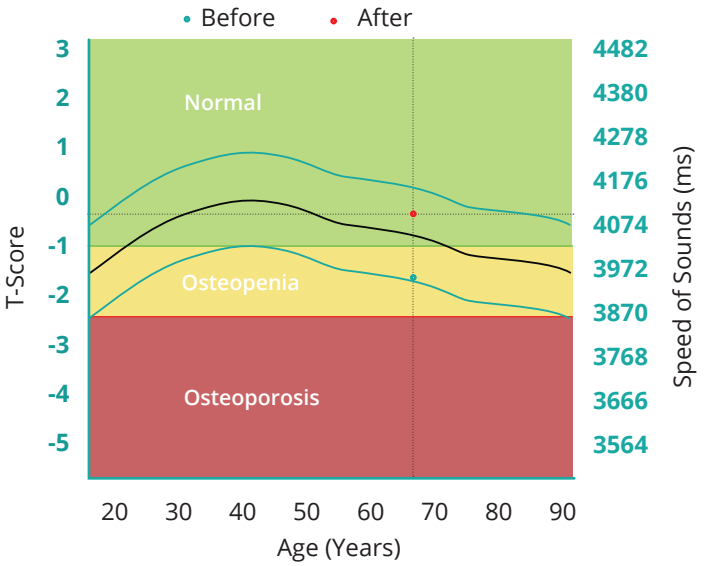




SAMPLE CLINICAL **BONE DENSITY INCREASE**

AGE: 66M

T-Score Increase: 1.4
From osteopenia to normal in 4 months.



04/22/2015 (After)*

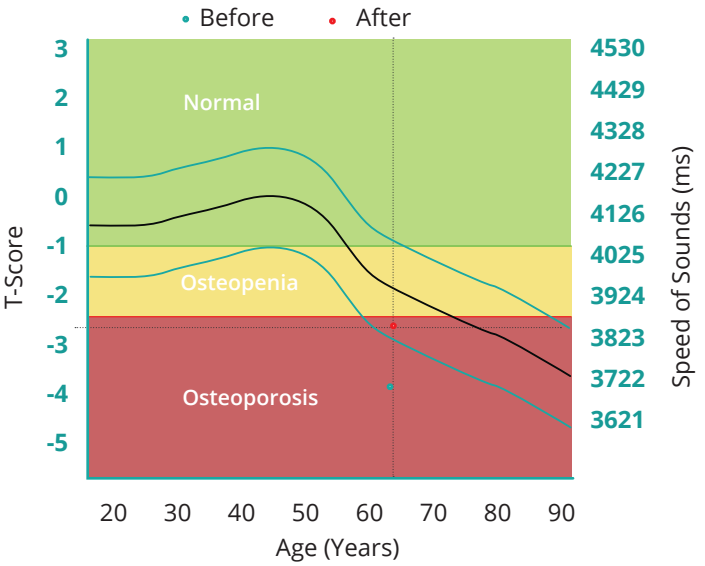
Age: 67 | T- Score: -0.3 | Z-Score: 0.6 | SOS: 4107

12/30/2014 (Before)

Age: 66 | T- Score: -1.7 | Z-Score: 0.8 | SOS: 3947

AGE: 62F

T-Score Increase: 1.2
From severe osteoporosis to osteopenia in 3 months.



04/22/2015 (After)

Age: 63 | T- Score: -2.7 | Z-Score: -0.7 | SOS: 3877

01/23/2015 (Before)

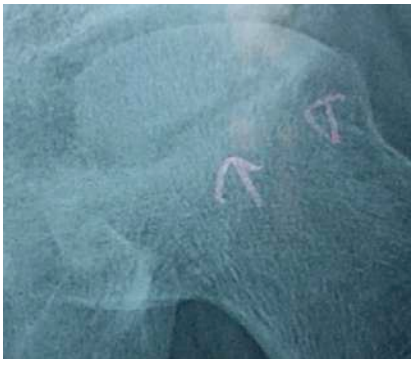
Age: 62| T- Score: -3.9 | Z-Score: -1.9 | SOS: 3740

**CBHI utilized FDA approved ultrasound bone densitometer by BeamMed in measuring and comparing BMD data of more than a thousand patients. Over 90% of the patients experienced increased bone density.*

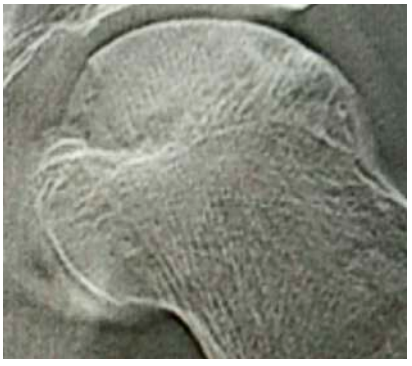
FRACTURE HEALING EFFECTS OF CIT

Steroid Induced Osteoporosis, auto fracture (Male, 52, Indonesia)

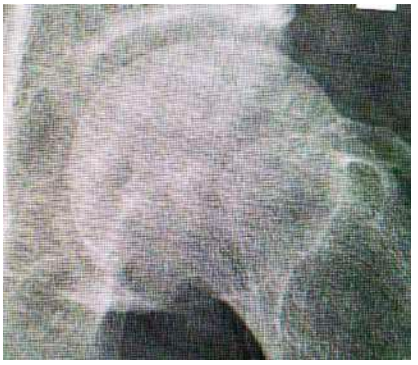
Dosage: MaraGen 2x /day for first 2 months and then only 1x. Able to walk normally again.



March 7, 2018



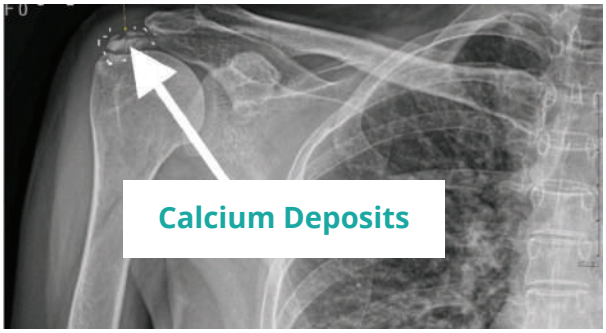
July 27, 2018

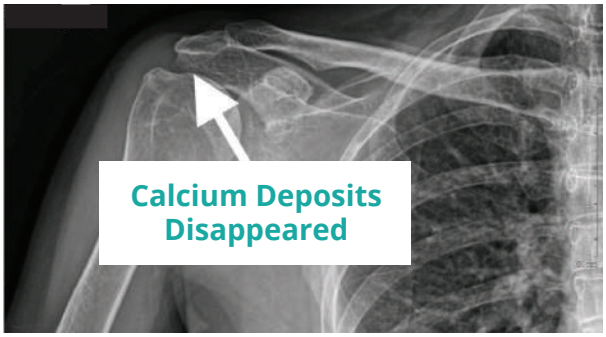


Dec 31, 2018

DECALCIFICATIO N EFFECTS OF CIT

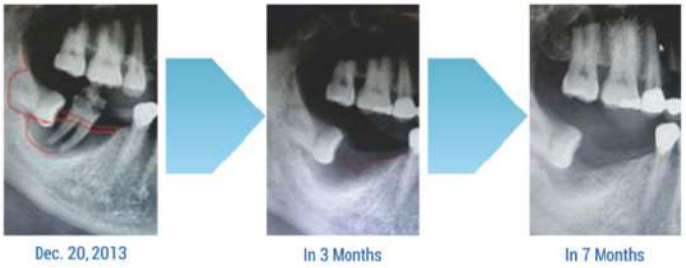
(Calcific Tendonitis Case)

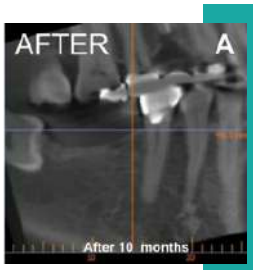




In many clinical cases, decalcification happened in organs, soft tissues, bones, joints, blood vessels, and even in cellular spaces, which helped to stabilize calcium homeostasis. CIT carries displaced calcium back to where it belongs in building stronger bones.

SIGNIFICANT REBUILDING OF JAW BONE & CAVITATION





RESULTS AFTER 10 MONTHS

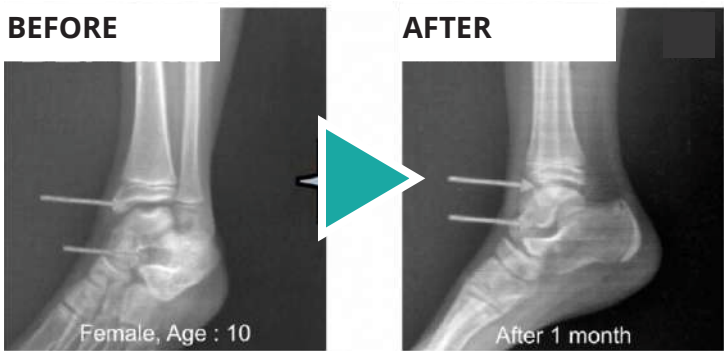
After the extraction and cleaning, no bone graft was done. The cavity was fully filled up with natural bone with entire jaw bone strengthened as well. (male, 60, Canada)

I had an extraction six months ago. My dentist suggested an implant after a bone graft. I remembered hearing about DentiGen and said I'd return after increasing my jaw bone density. He insisted that there is no way to increase jaw bone density. After taking DentiGen for a few months, I revisited the dentist. He could not believe what he saw in X-rays! He confirmed that the implant is now doable due to increased jaw bone density. Wow!

Sunok C. (female, 47)

CIT ON BONE NECROSIS

This ten-year old's limb was saved from amputation by CIT therapy. CIT regenerates unhealthy bone cells and even marrows, producing healthier blood cells.



REAL PEOPLE, REAL RESULTS

I had terminal colon cancer, which was metastasized to both liver and bones. I was devastated and had little hope when I received radiation therapy twice, and it did not have any effect. I had been taking only a pain killer and sleeping pills. The cancer level in October 2015 was CEA 200. When I heard about the remarkable effects of MaraGen on cancer from a close friend, I had to give it a try.

I started on it since Oct. 2015, and the cancer level dropped to 49.1. I could not believe it. On February 9, 2016, after taking MaraGen for four months, and all other blood test results showed almost normal. This is truly remarkable. I am feeling much better and getting better. My cancer is receding!

C. L. - Age 71, Female

I am a US Air Force pilot and was diagnosed with a brain tumor the size of a golf ball. I was devastated. However, when I heard about AIC therapy, I participated in it for three months before I got another brain scan at the Washington Bethesda Medical Center. The doctor asked me incredulously, "How come I do not see the tumor?" MaraGen is a miracle supplement!

Merry - Age 30, Female

I developed a Mitral valve prolapse heart condition that in which the two valve flaps of the mitral valve do not close smoothly or evenly, but instead bulge upward into the left atrium. I was a sprinter in my high school years, but then I could not climb the stairs or run. My heart pain continued, and the Richmond Cardiologist, Dr. Broumand, told me that my life stopwatch started, and I was dying.

I was then introduced to Pronuvia's scientific discoveries and innovation during the winter of 2010. On or about the Spring of 2011, I tried some of the CIT Calcium products, and I immediately felt the increase in my energy. Three months after receiving CIT therapy, I began walking on my treadmill. Initially, I walked for 15 minutes, but after two months, I began jogging.

E. Baragoosh - Age 59, Male

CONDITIONS TREATED WITH CIT THERAPY

Autoimmune disease (Lupus, Vitiligo, Hashimoto's, Crohn's, Celiac disease, eczema, MS, rheumatoid, etc.)

Lyme disease, HIV, Shingles and other viral infections

Parkinson's, ALS, Alzheimer's and other neurodegenerative diseases

Arthritis, Gout, CPPD, Inflammations

Mitochondrial Disease

Cancer (carcinoma, sarcoma, lymphoma, leukemia, multiple myeloma)

Arrhythmia, Heart palpitation, Mitral Valve Prolapse,

Diabetes, Metabolic Syndrome

Thrombosis, Hemolytic Anemia

Autism Spectrum Disorder,

ADHD, Epilepsy

Asthma, COPD

Glaucoma, Cataract, Intermittent Exotropia, Retinal Vein Occlusion

Menier's Disease, Aurora Migraine Disease, Tinnitus, Vertigo

Osteoporosis, Bone Necrosis

Chromosome 8 syndrome

Chronic Kidney Disease

Gum disease, Loose teeth

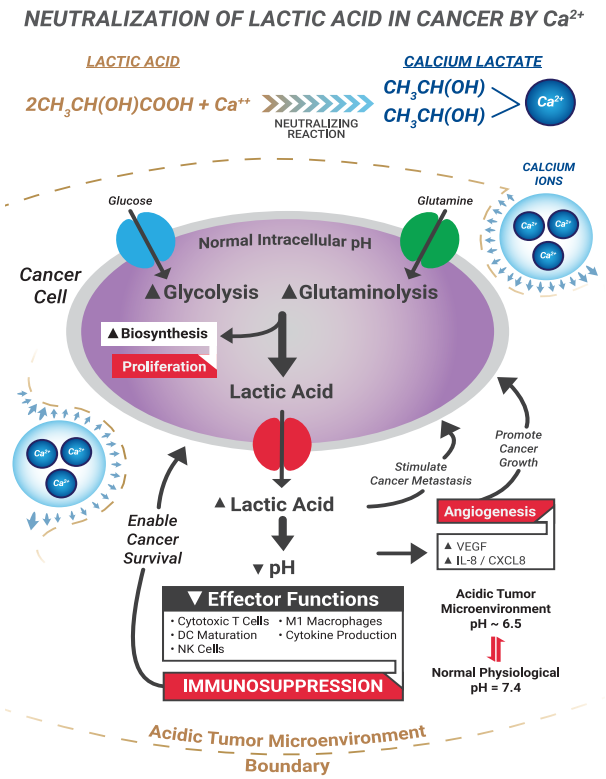
Calcification (joints and tissues), Calcific tendonitis, Fibrosis, Kidney and Gall Bladder Stones

Dysmenorrhea, infertility

Many more. There are more than 150 calcium-related diseases that cause secondary autoimmune and inflammatory responses.

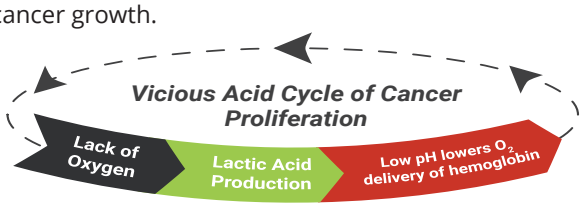
Ca^{2+} AWAKENS IMMUNE RESPONSE AROUND TUMORS

Cancer cells enhance their survival by suppressing the anti-cancer immune response by actively maintaining a slightly acidic micro-environment (pH 6.0–6.5), which leads to loss of T-cell function and serves as a basis for the establishment of the malignancy and its progression. They do this by secreting lactic acid by altering their metabolism. Therefore, cancer-generated lactic acid is a critical, immunosuppressive metabolite rather than a 'waste product.' Ca^{2+} effectively neutralizes lactic acid to ideal ~pH 7.4 to normalize immune response around the tumor and destroy cancer cells.



Ca^{2+} BREAKS ACID CYCLE OF CANCER

Studies have shown that the blood oxygen level of patients with cancer is much lower than that of healthy people. By restoring body pH to ideal slightly alkaline through CIT therapy, hemoglobin's oxygen-carrying capacity is greatly increased, breaking the acid cycle that helps cancer growth.



Dr. Otto Warburg found that depriving a cell 35% of its oxygen for 48 hrs made it cancerous. The resulting metabolic change to aerobic glycolysis is one of the hallmarks of cancer development.

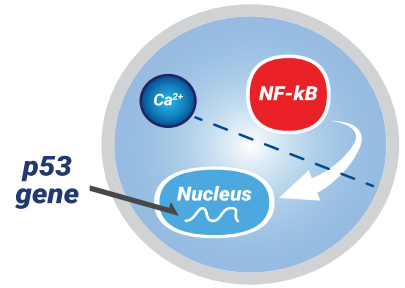
Ca^{2+} REACTIVATE P53 GENE

The p53 gene is involved in many key regulations, such as the prevention of cancer formation, including cell cycle arrest, DNA repair, and apoptosis (programmed cell death). In cancer cells, inactivation of p53 is a crucial step in tumor development and progression, reflected by the high incidence of TP53 mutations in different types of human cancers. Because p53 is one of the most frequently mutated genes in human cancers (~50% of all human cancers), it is one of the most well-studied genes in the history of cancer research.

Many types of research discovered the crucial role of Ca^{2+} plays in reactivating the p53 gene in cancer cells, leading to apoptosis of the cancer cell.

For instance, as shown in Process A, cancer cells mass-produce NF-kB protein, which interferes with the function of the p53 gene. The introduction of Ca^{2+} in the cytoplasm of cancer cells frees the p53 gene from NF-kB and reactivates it for apoptosis.

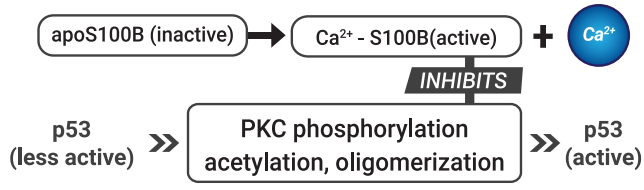
PROCESS A



SAC Ca^{2+} inhibits the synthesization of NF-kB in the cytoplasm and blocks interaction with p53 gene

Also, as shown in Process B, Ca^{2+} binding to S100B enables S100B to inhibit PKC phosphorylation, acetylation, and tetramerization, which results in the activation of p53. S100B, therefore, could promote the p53-dependent growth arrest and apoptosis pathways by assisting p53 nuclear translocation in the G1 phase of the cell cycle.

PROCESS B



Most cancer patients have a chronic intracellular ionic calcium deficiency, which makes ideal breeding grounds for tumor cell growth and proliferation. Cancer cells have less than 1% of ionic calcium compared to that of healthy cells. Providing safe intervals of the elevated level of ionic calcium induce a deadly environment for cancer cells by neutralizing lactic acid around cancer cells and maintaining oxygen-rich ideal pH of 7.35-7.45 and promoting reactivation of the p53 gene.

CANCER SAMPLE CASE #1

Cancer Remission under CIT Therapy

MS. M. HOLT (AGE 80)

Diagnosed with Multiple Myeloma (2012)

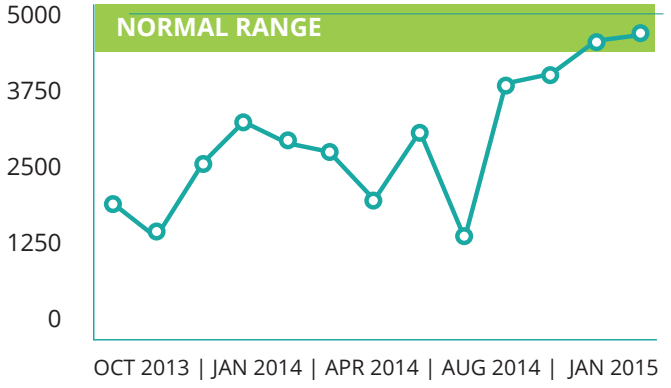
AIC THERAPY BEGAN DEC. 2013:

- Ms. Holt's hematological data, such as Platelet, WBC, and Neutrophil, have normalized and declared cancer free.
- Ms. Holt's chemo damaged kidney function has recovered. (GFR 12 to 62)
- Ms. Holt's BMD score also has significantly improved after treating with CIT, fully recovering from osteoporosis.

Date	White Blood Cell	Hemoglobin	Platelet	Neutrophil
10/25/2013	2,590	10.1	79,000	1,350
11/27/2013	**2,190**	**9.4**	**35,000**	**890**
12/27/2013	3,150	9.9	62,000	1,560
1/21/2014	3,650	10.9	89,000	1,710
2/18/2014	3,370	11.3	55,000	1,540
3/18/2014	3,260	10.8	55,000	1,670
4/8/2014	2,670	10.0	67,000	1,270
5/13/2014	3,520	9.9	89,000	1,760
6/17/2014	3,190	10.0	90,000	1,400
8/5/2014	4,160	11.5	101,000	2,160
10/7/2014	4,300	10.5	114,000	2,230
12/9/2014	4,700	11.2	145,000	2,290
1/27/2015	**4,760**	**11.4**	**152,000**	**2,560**
Normal Range	**4,000~ 10,800/mL**	**M: 13~17g/dL F:12~16g/dL**	**150K~ 400K/mL**	**2,000~ 7,000/mL**

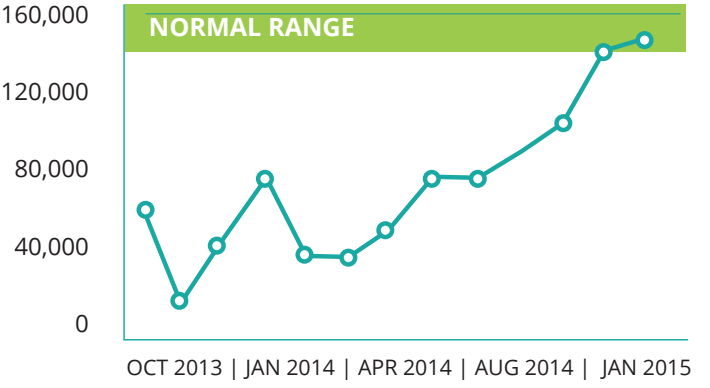
WHITE BLOOD CELL INCREASE

NORMAL RANGE: 4000~10,000/ML



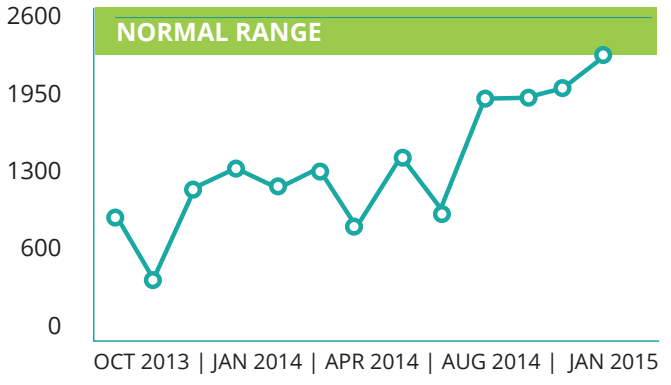
PLATELET INCREASE

NORMAL RANGE: 150,000~400,000/ML



NEUTROPHIL INCREASE

NORMAL RANGE: 2000~7000/ML



BONE DENSITY & GFR INCREASE

T-SCORE NORMAL RANGE: Above -1.0

Date	T-Score	GFR
Nov 25, 2015	-0.9	62
Nov 20, 2013	-3.6	12

CANCER SAMPLE CASE #2

Cancer Remission under CIT Therapy

MR. J CROOK (AGE 66)
DIAGNOSED WITH PROSTATE CANCER WITH LIVER METASTASIS (2018)

MR. J. CROOK'S DIAGNOSIS (JUNE 18, 2018)

Exam Type:
CT Chest

History:
Pleuritic Chest Pain, Query Metastatic Disease

Technique:
Unenhanced Volumetric Axial Images were obtained through the Chest with Standard Reformats

Findings:
There are several enlarged left supraclavicular lymph nodes, with the largest measuring 1.7cm in size.

There are fairly extensive coronary artery calcifications.

The visualized upper abdomen re-demonstrates numerous masses throughout the liver.
Re-demonstration of multiple enlarged upper abdominal lymph nodes.

Impression:
Left supraclavicular lymphadenopathy, favored to be metastatic in nature.

No other findings of intrathoracic metastatic disease.

MR. J. CROOK'S POST CIT RESULTS

(October 26, 2018)

Exam Type:
CT Abdomen and Pelvis Enhanced

History:
Known Prostate Cancer with Visceral Metastases

Technique:
Enhanced CT of the abdomen and pelvis with intravenous contrast

Findings:
After taking CIT since July:

The segment 4a lesion has decreased to 1.6 cm from 3.3 cm. Most of the other lesions have also decreased in size. No definite new lesions in the liver. The prostate gland has decreased in size with no new focal lesions.

Multiple lower retroperitoneal and iliac chain lymph nodes have decreased in size. A lymph node just inferior to the aortic bifurcation has decreased to 10 mm from 23 mm. No definite new lymphadenopathy.

	6/1	6/18	7/18	8/14	9/13	10/9
PSA	26.0 ug/L	46.0 ug/L	6.27 ug/L	2.62 ug/L	1.70 ug/L	0.99 ug/L

*REFERENCE RANGE OF PSA: 0-4.50 ug/L

CIT THERAPY GIVEN :

No concurrent conventional treatments done with AIC therapy

CIT therapy is given from the first week of July, 2018

Dosage:
5ml Maragen in 500ml water / 3 ~ 4 times a day

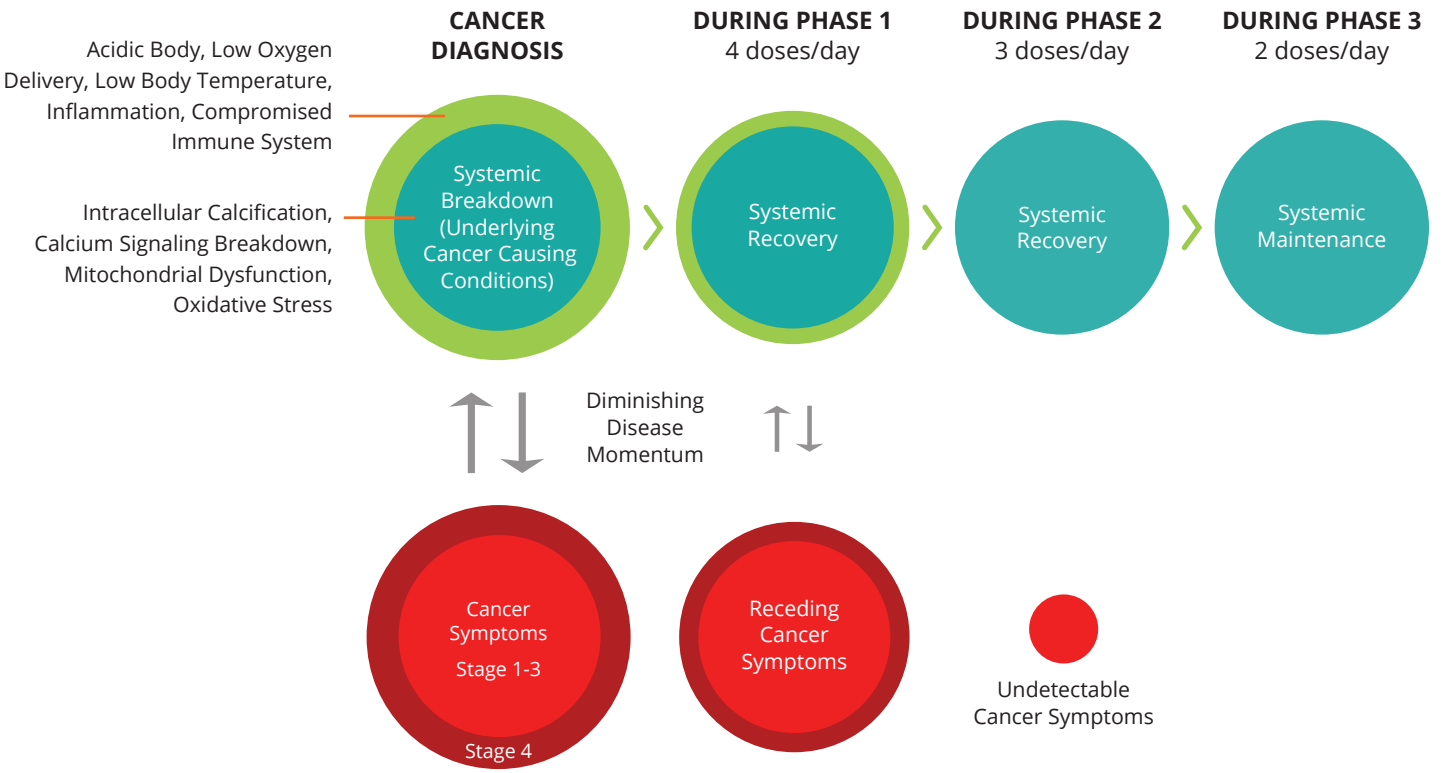
I tried MegaGen to lower my blood sugar level. Shortly after, my level dropped by 20 mg/dL and leveled out. I was excited and wanted more benefits, but I also knew I had to exercise and stop drinking. I noticed that I was sleeping deeper and woke up refreshed without waking up during the night.

Also, I noticed that my left knee, which bothered very much, suddenly felt much better. The benefits I experienced from CIT therapy surpassed anything I tried at any cost! And I tried it for one month only!

S. L. – Female, 40, Indonesia

CIT CANCER THERAPY PHASES

(Phases reflect typical CIT therapy for successful cases as either stand alone or adjunct therapy alongside alternative treatment. Below does not apply as adjunct or adjuvant therapy for conventional cancer treatments.)



Most cancer patients display low skeletal bone density and heavy calcification both in systemic and intracellular levels, which indicate severe calcium displacement caused by disturbed calcium homeostasis. Also, cancer patient's low body pH caused by lactic acid production of cancer cells further indicates the deep need for ionic calcium as it plays a critical role in maintaining proper body pH.

Because cancer patient's physiological need for calcium ion is 2 to 5 times greater than healthy people, a minimum of 4 to ideal 5 to 6 doses of MaraGen is recommended for all stage cancer patients, thus arming the body to fight cancer. Good time to take CIT if taking four times a day is: at 7 a.m., right after rising up, at 11 a.m., 30 min before lunch, at 5 p.m., 30 min before dinner, at 9 p.m., one hour before bed.

CIT THERAPY IS EFFECTIVE AGAINST CANCER BY RESTORING THE FOLLOWING TO ACHIEVE THE DESIRED HEALTH OUTCOMES:

Restores body to the ideal pH by neutralizing lactic acid and ammonia, which turns on immune response around tumors and inhibits angiogenesis

Restores the function of p53 gene and induce apoptosis

Inhibits inflammatory enzymes, such as COX-2, which spreads cancer

Restores mitochondrial functions and builds a strong barrier of healthy cells around cancer.

CIT therapy had many successes with all staged cancer patients, including the last stage with metastasis as a standalone therapy. However, for patients on other primary therapies, CIT therapy comes as an excellent adjunct and adjuvant therapy working synergistically alongside many alternative therapies. CIT therapy, however, is not very useful if administered alongside aggressive conventional cancer treatments.

Some patients respond very well to CIT therapy and may display improved blood works and heightened energy and activity levels. However, sometimes such rapid recovery may produce contradicting medical results such as enlarged tumor size and elevated cancer markers. In such cases, as long as the patient's condition is better and all the blood works look promising, please do not stop CIT therapy just because of the larger tumor size and increased cancer markers.

Rapid apoptosis of cancer tumors may cause cancer to look more prominent in the scans and raise the cancer markers in the initial weeks to an even alarming level. Enlarged tumors collapse, and cancer markers drop as the patient's condition improves. Some tumors are left hollow with some scar tissues and begin to breakdown subsequently. Please follow the CIT therapy phase 1 to 3 for all cancer patients.

Even after successful conventional treatments with the absence of cancer symptoms, CIT therapy Phase I is recommended if the underlying cancer-causing systemic condition is not addressed. Some aggressive conventional treatments may leave the patient's systemic health more damaged.

CRITICAL MINIMUM 3 MONTHS OF CIT TREATMENT

Because of CIT's beneficial impact at systemic levels, the health improvement experienced may fluctuate for the first 3-month period of the treatment for most patients until these positive results start to dominate during the second 3-month period of therapy.

It is also during the first 3-month period of the treatment when healing reactions are experienced for some patients as our body tries to balance the healing effects of CIT. Healing reactions from CIT tends to subside and disappear for most people during the second 3-months period of CIT therapy.

Therefore, it is advised that CIT treatment should be given at least for a minimum of 3-month of the period to look for any positive results before committing another 3-month of CIT therapy. If any positive results are observed during the first 3-month period, then we recommend another 3-month period of therapy to be given to curb the disease momentum.

During these two 3-month periods, many patients experienced enough positive effects of CIT therapy that encourages them to continue the treatment all the way to full recovery.

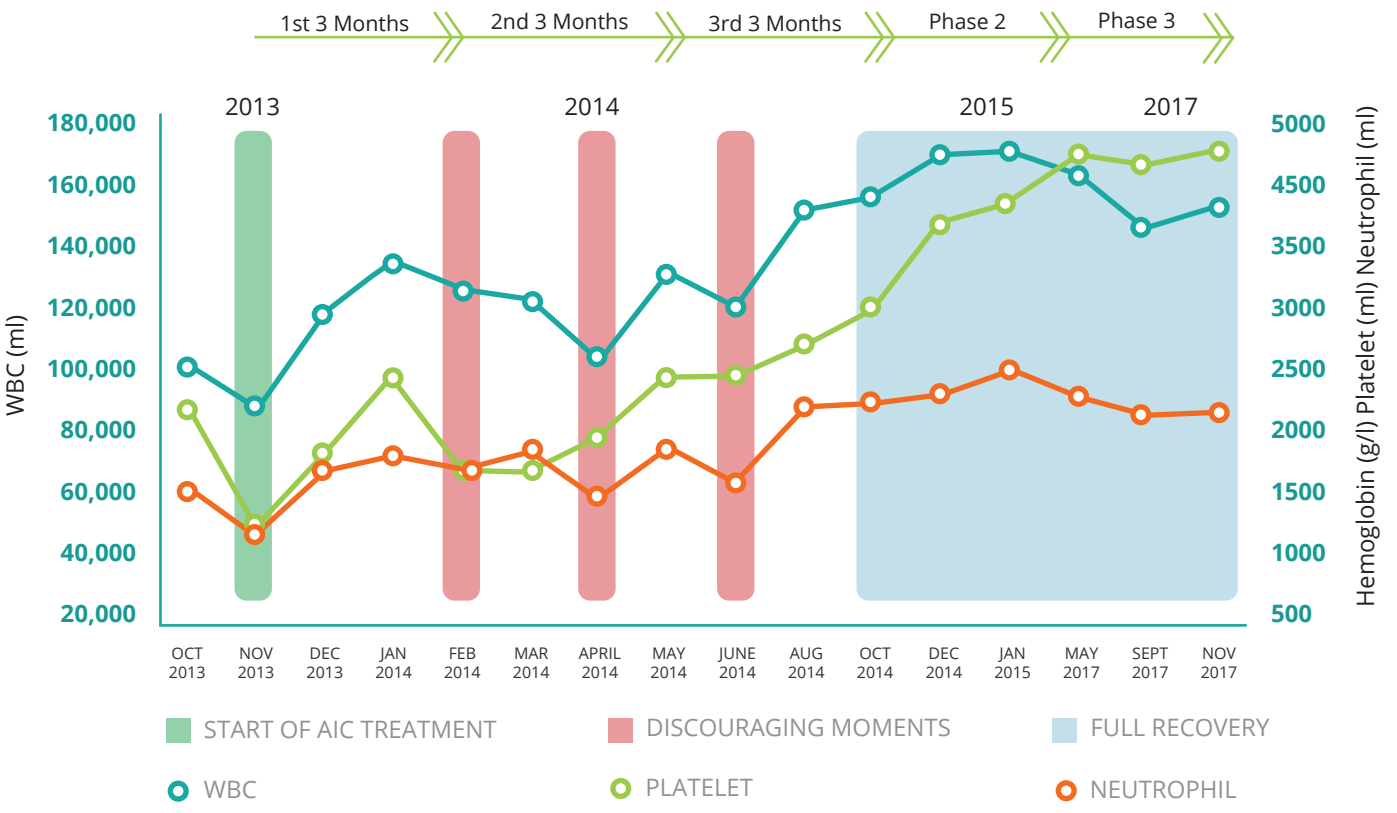
3 MONTHS OF CIT TREATMENT CASE STUDY

In the case of an 80-year old lady with last stage multiple myeloma, the road to her full recovery had mixed signals.

In the first 3-months of CIT therapy, there was a clear sign that the therapy was working, followed by a dip that seems to indicate that it was not. Because there were some good signs, the second 3-months of treatment were given, which also had ups and downs. However, during the second 3-months period of treatment, there were more positive effects, including her general feeling of wellbeing.

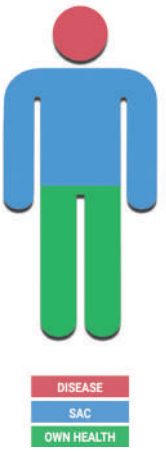
When Molly had committed to the third 3-months of treatment, her lab results and health steadily climbed up to full cancer remission. Her bone density returned to normal (-0.9) from osteoporosis (-3.4), and the kidney function bounced back up to GFR 60 from GFR 10.

MULTIPLE MYELOMA CASE: MOLLY H. (80 F)



CIT THERAPY PHASE I

Phase 1: Remission Induction | **Duration:** Minimum 6 months



Many positive results or rapid recovery from symptoms may be experienced during Phase 1. Results may fluctuate for the first three months. If CIT therapy seems to be helping, continue to second 3-months. When the patients feel better and symptoms disappear, do not stop or reduce the dosage of the protocol but remain at the protocol's maximum dosage.

At this phase, the improved condition is maintained only by the continued cellular influx of ionic calcium. The purpose of Phase 1 is reversing the disease momentum and rebuilding systemic health. There is a high chance of recurrence of disease (especially cancer) if CIT protocol stops here. Continue Phase 1 until full remission if CIT therapy is helping.

Adjuvant detox programs are recommended during Phase 1 based on the patient's toxin profiling.

CIT THERAPY PHASE II

Phase 2: Consolidation | **Duration:** 6-12 months

Phase 2 starts when symptoms have completely disappeared, and patients feel already recovered from the disease. If the purpose of Phase 1 is to turn the disease momentum around and rid of the disease symptoms, the purpose of Phase 2 is to give our body enough time to repair and boost systemic health to eliminate the chance of recurrence.

It took years for our overall health to fail, and therefore we must give our body time to rebuild it. Since bone health is closely related to cellular calcification and subsequent systemic damages, taking CIT therapy at full dose all the way until the bone density returns to the normal range is recommended. (preferably with T-score greater than -1.0)

CIT THERAPY PHASE III

Phase 3: Maintenance | **Duration:** All the way

Phase 3 starts when the patient is fully recovered not just from disease symptoms but also in systemic levels as well. Because of CIT therapy's efficacy on a wide range of health spectrum, patients may end up having better health than even before the disease symptoms first appeared. The purpose of Phase 3 is to maintain what has been achieved through Phase 2.

Calcification from bone loss, which leads to cellular dysfunction, is inevitable with aging; however, its most detrimental impact is the triggering of the onset of degenerative diseases. CIT therapy's maintenance program, Phase III, together with a healthy diet and lifestyle, is designed to prevent being succumbed to diseases again. One dose/day of MaraGen is recommended for recovered patients.

SAMPLE CIT DOSAGE PROTOCOL

The number of bottles required is based on 250ml size. In the below estimate, Phases 1, 2, and 3 are estimated to be 6 months each. Please refer to *CIT Therapy Dosing Protocol* for managing expectations.

ALL STAGE CANCERS:

Please take CIT on an empty stomach at least 30 minutes before a meal.
Take one dose after waking up, one at 30 minutes before lunch, one at 30 minutes before dinner, and one at 1 hour before bed.

Blood tests are recommended for every 2-4 weeks to monitor progress.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

Post-Phase III Maintenance Dosage: 1x MaraGen daily after 3 years of no recurrence

PHASE I	PHASE II	PHASE III
		
Take 5ml of MaraGen in 500ml of water 4x daily	Take 5ml of MaraGen in 500ml of water 3x daily	Take 5ml of MaraGen in 500ml of water 2x daily
15 bottles	11 bottles	8 bottles

NEURO-DEGENERATIVE DISEASE:

For Parkinson's, MS, ALS: Use MaraGen
For Alzheimer's: Use AlziGen.

Please take CIT on an empty stomach at least 30 minutes before a meal.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

This dosage is also effective for epilepsy, arrhythmia, Lyme disease, and metabolic syndrome.

Post-Phase III Maintenance Dosage:
1x MaraGen daily

PHASE I	PHASE II	PHASE III
		
Take 5ml of MaraGen in 500ml of water 3x daily	Take 5ml of MaraGen in 500ml of water 2x daily	Take 5ml of MaraGen in 500ml of water 1x daily
11 bottles	8 bottles	4 bottles

ARTHRITIS:

For Osteoarthritis & Rheumatoid Arthritis

CIT is not recommended for bone on bone arthritis cases.

Please take CIT on an empty stomach at least 30 minutes before a meal.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

Post-Phase III Maintenance Dosage:
1x CartiGen daily

PHASE I	PHASE II	PHASE III
		
Take 5ml of MaraGen in 500ml of water 2x daily	Take 5ml of CartiGen in 500ml of water 2x daily	Take 5ml of CartiGen in 500ml of water 1x daily
8 bottles	8 bottles	4 bottles
Take 5ml of CartiGen in 500ml of water 1x daily		
4 bottles		

OSTEOPOROSIS:

To benefit from CIT, patients must stop osteoporosis drugs and wait 3-6 months before taking CIT.

Cancer patient's bone density will not rise much until remission happens first.

Please take CIT on an empty stomach at least 30 minutes before a meal.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

Post-Phase III Maintenance Dosage:
If T score is below -1 at the end of Phase 2, staying on Phase 2 until the T score reaches -1 is recommended.

PHASE I

Take 5ml of MaraGen in 500ml of water 2x daily

8 bottles

PHASE II

Take 5ml of MaraGen in 500ml of water 1x daily

4 bottles

PHASE III

Take 5ml of MegaGen in 500ml of water 1x daily

4 bottles

DENTAL ISSUES:

Removal of infected tooth and toxic tooth by a qualified biological dentist is recommended.

Please take CIT on an empty stomach at least 30 minutes before a meal.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

Post-Phase III Maintenance Dosage:
1x DentiGen daily

PHASE I

Take 5ml of MaraGen in 500ml of water 2x daily

8 bottles

Take 5ml of DentiGen in 500ml of water 1x daily

4 bottles

PHASE II

Take 5ml of DentiGen in 500ml of water 2x daily

8 bottles

PHASE III

Take 5ml of DentiGen in 500ml of water 1x daily

4 bottles

AUTO-IMMUNE DISEASE:

For Lupus, Crohn's, Hashimoto's, Eczema, Celiac, Vitiligo, etc

Please take CIT on an empty stomach at least 30 minutes before a meal.

Bone scans or CTx or NTx measurements are also recommended in the beginning of each phase to monitor bone health.

Post-Phase III Maintenance Dosage:
1x MaraGen daily

PHASE I

Take 5ml of MaraGen in 500ml of water 2-3x daily

11 bottles

PHASE II

Take 5ml of MaraGen in 500ml of water 2x daily

8 bottles

PHASE III

Take 5ml of MaraGen in 500ml of water 1x daily

4 bottles

MARAGEN

FORMULA FOR CANCER AND CHRONIC DEGENERATIVE DISEASES

MaraGen is Pronuvia's most robust CIT-applied product, which aims to rebuild degenerated systemic health from the cellular level. By promoting decalcification from cellular to systemic level by stimulating osteoblasts, MaraGen helps to recover from over 150 degenerative diseases that are thought to be calcium-related. Many studies link cellular calcification to mitochondrial disease, metabolic syndrome, neurodegenerative diseases, and even cancer.

According to Mitochondrial Free Radical Theory, calcium ions accumulated in the walls of mitochondria induces production of reactive oxygen species (ROS), which damages DNA, RNA, and proteins, and thus becomes the leading cause of both aging and cancer. By triggering calcium homeostasis, Maragen can reduce the production of ROS, restore cellular signaling, repair mitochondria dysfunction, build a strong immune system, and promote stem cell activities.

Pathogens and cancer cells thrive in an acidic environment due to the lack of oxygen in the body. Ionic calcium helps our body to neutralize the acid and restore the body pH to ideal 7.4, boosting hemoglobin's oxygen-carrying capacity to maximum and strengthening the immune system's ability to detect and destroy pathogens, also reducing inflammation in the process.

MEGAGEN

FORMULA FOR OSTEOPOROSIS AND BONE HEALTH

Osteoporosis and hormonal imbalances start affecting many people in their middle ages. Utilizing revolutionary CIT technology that delivers ionic calcium directly to our blood plasma, MegaGen is formulated to trigger our body's natural responses to balance our hormones and initiate the cascade of natural healing processes.

MegaGen essentially does what MaraGen can at maintenance strength. MegaGen is formulated to be a maintenance product for healthy individuals who want to fight aging-related bone loss and subsequent disruption of calcium homeostasis, which unchecked will ultimately lead to hosts of degenerative diseases. Even as an antioxidant, MegaGen is unmatched in its potency and effectiveness compared to other products at a matching price range.

MegaGen is truly a champion in maintaining optimum health, and considering its manifold health effects, it should be a part of everyone's daily regimen. Benefits of MegaGen are too many to list.

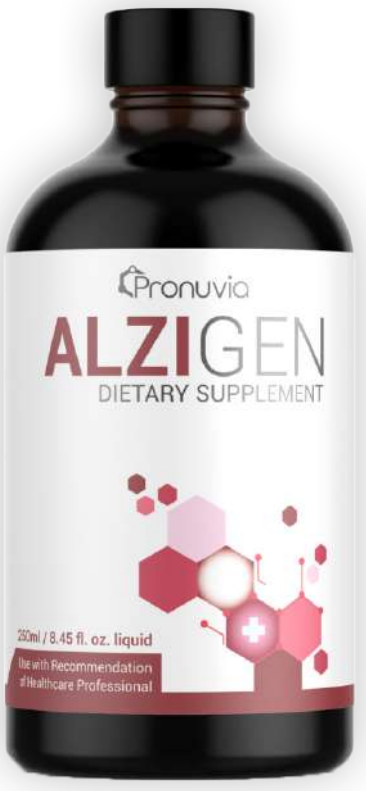
CARTIGEN

FORMULA FOR ARTHRITIS AND JOINT HEALTH

Life takes a toll on our bones and joints, and with age comes painful joints caused by wear and tear of cartilage and bones. Unfortunately, modern medical science only provides solutions that may ease pains and inflammations with many side effects. Moreover, because there are no blood vessels delivering nourishment to joints readily, the natural healing process of joints is too slow for most patients to overcome daily damage.

Formulated for joint repair, CartiGen helps more ionic calcium to permeate deeper into the joints to help rebuild damaged cartilage by stimulating stem cells, namely chondrocytes. Ca2+ mediated signaling is essential for the maintenance of stem cells and for promoting their development and differentiation. CartiGen also helps to relieve pain by restoring calcium homeostasis around joints and removing painful mineral deposits. Also, anti-inflammatory and immune-normalizing effects of ionic calcium offer a scientifically superior solution for easing joint disorder pains.

For faster results, MaraGen can be taken together with CartiGen.



ALZIGEN

FORMULA FOR BRAIN HEALTH

The global cost of Alzheimer's disease (AD) and dementia is estimated to be $818 billion. However, there are still no drug treatments available that can provide a cure for Alzheimer's disease yet. Many health professionals label AD as type 3 diabetes, and others suggest age, genetics, and mineral imbalances as the possible cause of AD.

According to one scientific research, senior women who have low bone density are more than twice likely to develop Alzheimer's disease. It indicated that AD is closely linked to osteoporosis and subsequent cellular calcification. New research has also linked the onset of Alzheimer's disease to disturbance of calcium homeostasis in the brain cells, which alters calcium signaling pathways that account for at least three major and interrelated toxic pathways: oxidative stress, mitochondrial dysfunction, and neuroinflammation in neurodegenerative diseases. The aging-associated progressive loss of bone mass is largely to blame for this disturbance of calcium homeostasis and now believed to cause other neurodegenerative diseases as well, such as Parkinson's, MS, and ALS.

By triggering osteoblast to clear cellular calcification, Alzigen helps to restore calcium homeostasis in cells and has thus shown promising results for AD patients.

DENTIGEN

FORMULA FOR IMPROVING DENTAL HEALTH

CIT therapy raises plasma calcium ion level and stimulates the release of TH and PTH that balances calcium homeostasis and increases the bone turnover rate to build strong bones. This process helps to rebuild alveolar bones of maxillary and mandible, hence increasing the rate of successful implants or periodontal treatments.

When working in conjunction with bone grafts, DentiGen accelerates the rebuilding of extraction sockets, promotes the integration of grafted bones, and assures better osseointegration of implant materials. Complementing bone grafts with DentiGen not only speeds up the procedure but also increases the success rate, even treating severe cases once thought not possible by dentists.

Human periodontal ligament stem cells (hPLC) in periodontal ligaments differentiate into root cementum or alveolar bones and are known to be optimally active when the ratio of calcium and phosphorus ions is at 2:1. DentiGen helps the stimulation of hPLC by bringing calcium to phosphorous ratio to this ideal level. DentiGen is also prescribed for strengthening loose teeth and for treating diseased gums.

For faster results, MaraGen can be taken together with DentiGen.

OSSO JR

FORMULA FOR OPTIMIZING GROWTH POTENTIAL

In Canada, 49% of infants are born calcium deficient. As optimum calcium homeostasis is crucial for healthy cell multiplications, either lack or disturbance of proper ionic calcium levels poses a considerable risk for developing children. Formulated to be consumed according to children's body weight and needs, Osso Jr implements CIT technology to helps kids to grow to their full potential. CIT builds a stronger frame to maintain the more robust immune system by maintaining optimal body pH level, which maximizes oxygen delivery and discourages pathogen proliferation.

Many research linked calcium deficiency in childhood to ADHD and autism, and restoring healthy calcium homeostasis by CIT therapy offers a good fighting chance. Osso Jr improves the mental focus of children and helps kids be more energetic naturally to help them be kids more.

Use Osso Jr for healthy kids, and use MaraGen for treating diseases.

"Bone health is directly related to our overall health. Emptier bone characterized by osteoporosis or osteopenia indicates not only a higher risk of fracture but also a greater chance of developing degenerative diseases.

Why? Because emptying bones cause calcification in both cellular and systemic levels, causing cellular communications mayhem by disrupting calcium signaling. Balancing calcium level is crucial as it can be the key to treating chronic degenerative diseases, including cancer.

I hope CIT therapy brings renewed hope for many who are suffering"

Paul. K. Lee

Ph.D. in Chemistry,

Inventor of CIT calcium

DOCOFDETOX

docofdetox.com | CITTherapy.com