

DOCOFDETOX CALCIUM ION THERAPY

THE HOLY GRAIL OF ADVANCED WATER FASTING

Sometimes, less is more – much more. Less is the healing – like when we stop eating and give ourselves a break. Today, people are eating themselves to death on an emotional and physical level. Jesus used to fast. Fasting helps move you into a meditative state – into a still and calm place in the present moment. Fasting helps you to look inward, to move your focus from the external to the internal. This is where the real healing begins! Autophagy is one important benefit of fasting. Autophagy – literally meaning ‘self-eating’ – is your body disposing of damaged cells, damaged muscle and tissue cells, damaged DNA and damaged mitochondria. The only way to get rid of tumors, scar tissue and unhealthy cells is through autophagy.

Autophagy cleans up your system and also stimulates stem cell regeneration. If we are continually eating, the body does not move into autophagy.

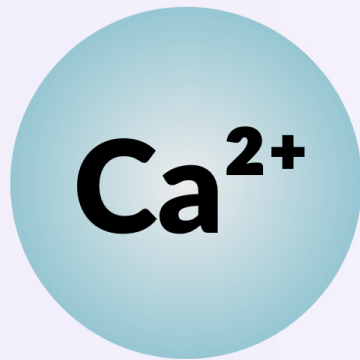
Fasting can increase stem cells, stimulate tissue repair, reset DNA, repair metabolic processes, increase ketones, heighten brain clarity, and reset the microbiome.

Many of these processes are dependent on calcium ion homeostasis. Calcium ions are the most important molecule within the human body, involved in 100,000+ metabolic processes. And, just like fasting, calcium ions also unleash stem cells which unleash the body’s greatest power to heal!

Calcium Ion homeostasis in the body is critical; as we grow older, we start to lose calcium from our bones, calcifying our body at the cellular level. As a result, mitochondrial function is damaged which causes oxidative stress, damages cellular function and, most importantly, interferes with healthy calcium signalling. When we do not have calcium ion homeostasis, our cells receive the wrong signals leading to aging, calcification of the body, and even disease such as cancer. Doc of Detox Calcium Ion Therapy is one of the biggest scientific nutritional breakthroughs. When combined with Advanced Water Fasting, it is like attaching a rocketship to your metabolism and actually reversing the hands of time! For people already in a state where the signals needed for autophagy and stem cell regeneration are compromised, activating autophagy and stem cell regeneration is much more difficult without Calcium Ion Therapy. Let’s be honest, the majority of the population have systems that are greatly compromised.

In 2009, Dr. Paul Lee invented Doc of Detox Calcium Ion Therapy, in an effort to make a better bio-available calcium to support his friend with his recovery from the final stages of prostate cancer with colon metastasis. Dr. Lee's friend recovered, after engaging in Calcium Ion Therapy, spurring on intensive research leading to the discovery that Calcium Ion Therapy has a profoundly positive effect on many degenerative diseases including osteoporosis, autoimmune diseases, cancer, Parkinson's disease, and arthritis, among others.

FUNCTIONS OF Ca²⁺ IN OUR BODIES



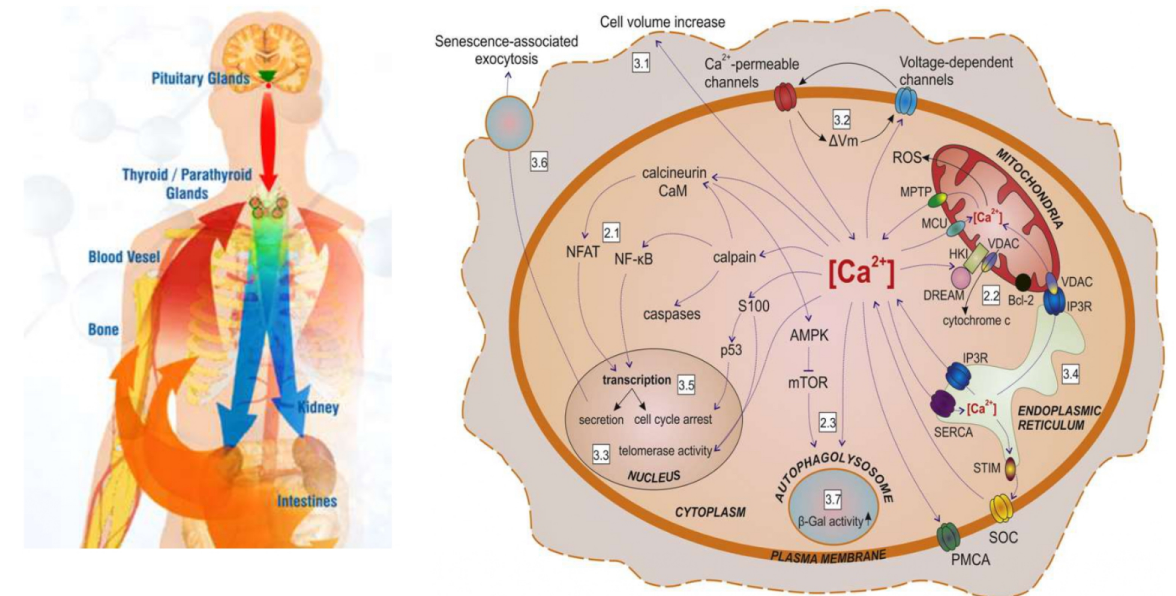
- MUSCLE AND HEART CONTRACTION
- BONE AND TEETH / BLOOD CLOTTING
- STEM CELL REGULATION
- NEUROTRANSMITTER / SECOND MESSENGER
- HORMONE SECRETION / ENZYME ACTIVATION
- IMMUNE SYSTEM / CELL MEMBRANE STABILITY
- CELL FUNCTIONS AND DNA REPLICATION

Ca²⁺ IS ONLY PHYSIOLOGICALLY ACTIVE CALCIUM

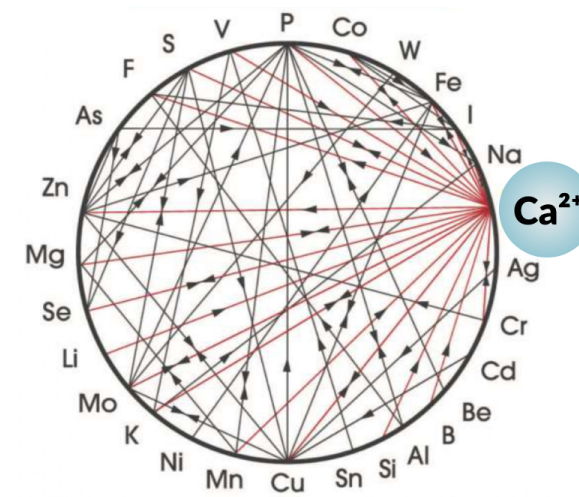
Calcium ions play a very important role in the body – they are involved in 100,000+ metabolic processes and are involved in regulating other mineral's functions in our body. It is the only physiologically active form of calcium. Calcium ions are important for muscle and heart contraction, building bone and teeth, blood clotting, stem cell regulation, neurotransmitter function, hormone secretion, enzyme activation, optimal immune function, cell function, and DNA replication. When going through all of these processes, it is

important to have the ideal and exact amount of calcium ion concentration extracellularly and intracellularly. Otherwise, the communication within the body breaks down; when communication breaks down, everything breaks down. This biological communication breakdown is what happens to everybody as we grow older; as we age, we lose calcium ion homeostasis. Osteoblast, bone creation, stop around the age of 30 due to this loss of calcium ion homeostasis, setting the stage for osteopenia and osteoporosis along with other degenerative and autoimmune diseases.

MANY FUNCTIONS OF Ca²⁺



CALCIUM-MINERAL INTERACTION



CALCIUM PLAYS A SIGNIFICANT AND LEADING ROLE IN REGULATING OTHER MINERAL'S FUNCTIONS IN OUR BODY.

Loss of calcium ion homeostasis is what is experienced by astronauts that live on the space station. On average, during a six-month stay, astronauts lose 14 to 30 percent of their bone density. This bone loss is not due to a diet lacking calcium; it is due to a lack of gravity in space whereby astronaut's bones are not stressed. When bones are not stressed and challenged, all the calcium entered into a system is not fully utilized as calcium ions – all the calcium is going in as protein-bound calcium and all protein-bound calcium is not physiologically active. Somehow, protein-bound calcium has to be converted to calcium ions.

ASTRONAUTS GET OSTEOPOROSIS IN 6 MONTHS



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.

When we age and become more sedentary, we experience a situation similar to that of the astronauts; without putting stress on our bones, we cannot utilize protein-bound calcium properly and we experience bone loss. Additionally, the stresses of life, along with the processed food the majority of the population is taking in, creates acidity in the body. This excess acidity creates an environment where our body is actually leeching precious calcium ions to buffer acidity; our body reaches out to our bones – breaks down our bones – to get those much-needed calcium ions to balance the body's pH. This comes at a heavy price, however, because once the calcium ions are pulled from the bones, our body goes into calcification mode. This means that all the calcium that is coming out of our bones is being used in an attempt to restore pH balance but which leads to calcification of the body; the body stores excess calcium ions at the cellular level which causes oxidative stress, mitochondrial dysfunction and disrupts calcium signaling.

CALCIUM DEFICIENCY

EITHER NOT GETTING IT ENOUGH OR UNABLE TO UTILIZE WHAT IS ABSORBED



PROCESSED FOODS

Stored calcium is leached out from the bones to restore pH balance as buffer.



LESS ACID IN STOMACH OVER 60 YEARS OLD

Less acid in stomach over 60 years old leads to less calcium absorption.



LACK OF EXERCISE / SEDENTARY LIFE STYLE

Absorbed calcium doesn't end up in the bones since only weight bearing exercise triggers bone formation.



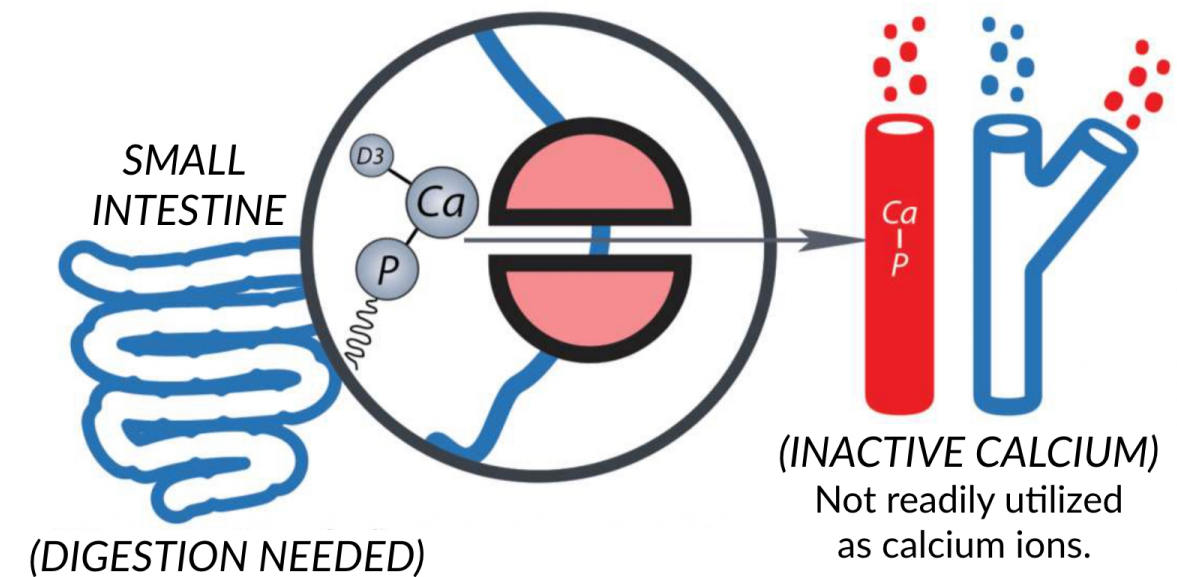
STRESS/ FEAR

Unrelieved stress causes inflammations that leaches our body of calcium.

TYPICAL CALCIUM ABSORPTION



PROTEIN BOUND CALCIUM

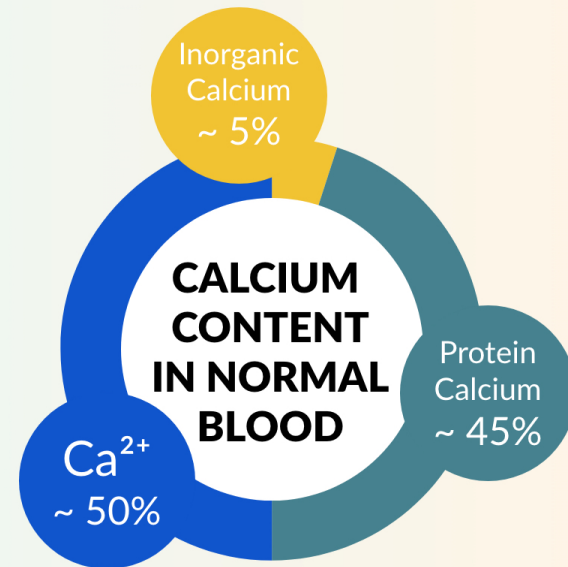


All the calcium taken in from supplements and food goes into the body as protein-bound calcium and requires digestion and the support of Vitamin D to be utilized. Our body works to maintain a good level of calcium ions in our blood serum. If the body cannot get calcium ions from protein-bound calcium, through diet and supplementation, it reaches out to our bones. The problem today is that we are actually ingesting a lot of calcium, but this protein-bound calcium is not able to be utilized as calcium ions in the body.

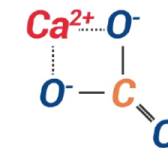
ONLY CALCIUM ION IS PHYSIOLOGICALLY ACTIVE

Ionized calcium (Ca^{2+}) is the only *physiologically active form* that can be absorbed in our bones by stimulating hormones, which trigger the bone formation process (osteoblast).

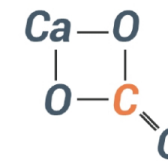
AND OUR BLOOD HAS 50% OF SERUM CALCIUM ALREADY IN IONIC FORM !!!



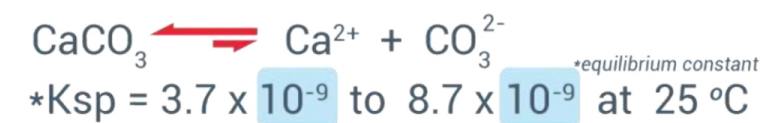
Doc of Detox Calcium Ion Therapy is the world's first calcium ion delivery system. Calcium ions have a similar molecular structure to regular calcium carbonate, though they utilize weak sigma anti-bonding and have an electrical charge. This new calcium actually goes into the system as calcium ions, by way of osmotic pressure and diffusion – no digestion nor support of Vitamin D is needed. Calcium Ion Therapy is able to trigger a cascade of hormonal responses which is the foundation of its healing power; it triggers the pituitary gland to release a thyroid-stimulating hormone which initiates a massive osteoblast to build bone. In addition to building strong bones, Calcium Ion Therapy clears up the displaced excess calcium throughout the body.



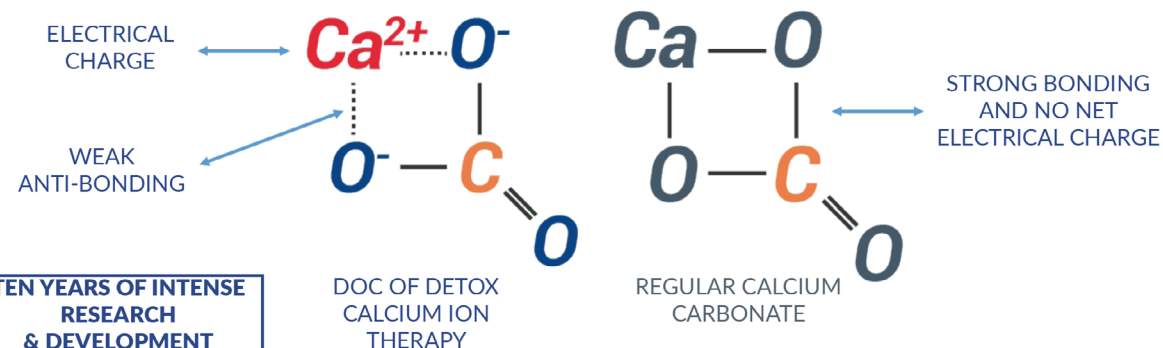
CIT CALCIUM CARBONATE



REGULAR CALCIUM CARBONATE



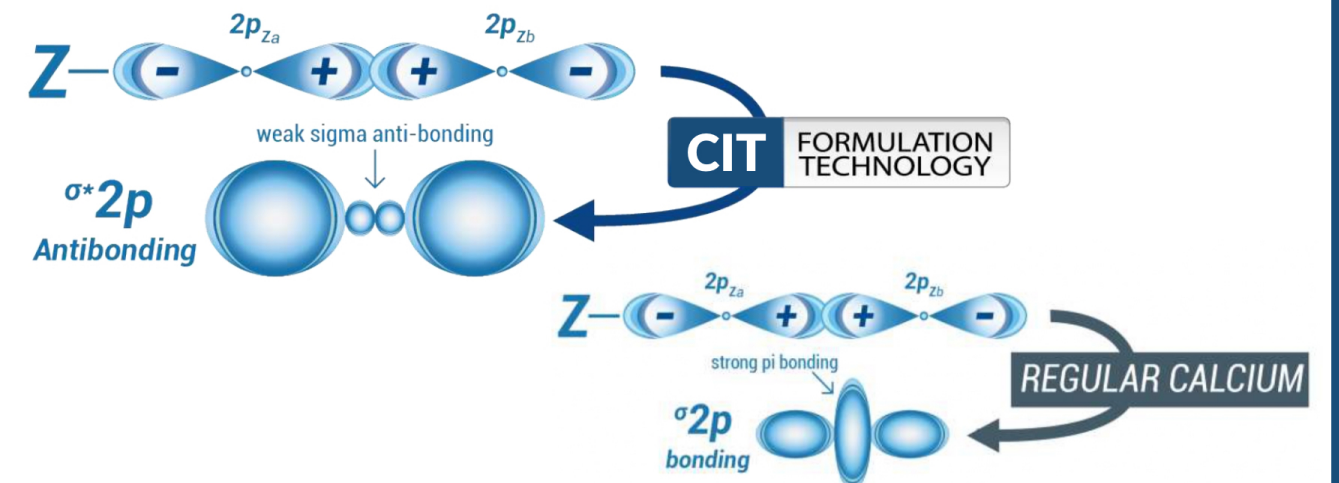
200X MORE SOLUBLE!
3X FASTER CHEMICAL REACTION!



INVENTION OF NEW CALCIUM CARBONATE

ANTI-ORBITAL IONIC CALCIUM (AIC- CaCO_3)

DOC OF DETOX CALCIUM ION THERAPY IS THE FIRST SAFE CALCIUM-ION-DELIVERY-SYSTEM TO INCREASE THE AMMOUNT OF CALCIUM ION IN OUR SYSTEM, WHICH INITIATES A CASCADE OF HORMONAL RESPONSES, INCLUDING OSTEOBLAST TO BUILD STRONG BONES.



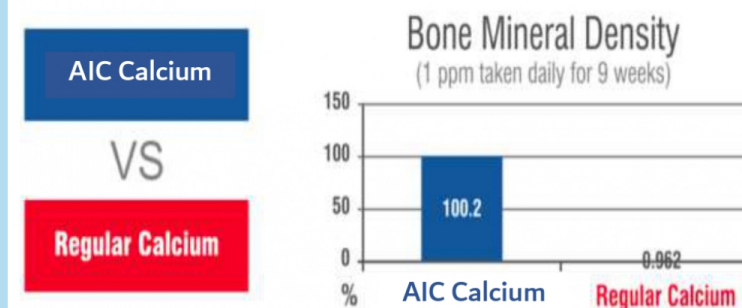
INVENTION OF NEW CALCIUM CARBONATE

ANTI-ORBITAL IONIC CALCIUM (AIC- CaCO_3)

Doc of Detox Calcium Ion Therapy is not considered calcium supplementation – it is a therapy. Unlike traditional supplementation, only a very small amount of this calcium is needed to trigger hormonal responses, as the calcium is in a form that our body can recognize right away. In this case, less is definitely more. Research shows that compared to regular calcium, calcium ions' bone-building power is about a hundred times higher than regular calcium. In human trials, Doc of Detox Calcium Ion Therapy has increased bone density significantly. Even when there is a bone fracture, the bones have been shown to heal much faster and more completely. Most importantly, calcium ions decalcify not only bone spurs, joint calcification, and soft tissue calcification, but calcium ions decalcify at the cellular level; they clear out excess calcium so mitochondrial function can be restored, oxidative stress can be reduced, and calcium signaling can be restored. This is very important – when 50 trillion cells in the body get restored, the health effects can be mind-blowing!

CALCIUM ION THERAPY vs REGULAR CALCIUM

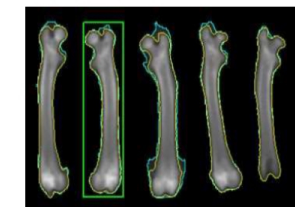
Bone Density Clinical Result NO MATCH!



Bone Density

Clinical Trial Result		
	Dose Conc.	BMD*
AIC Calcium	0.0001 %	102.2
Regular Calcium	0.01 %	96.2

*Bone Mineral Density



CALCIUM SUPPLEMENTATION (HEALTH RISKS)



CALCIUM ION THERAPY (RESOLVES ALL CALCIUM PROBLEMS)

CALCIUM ION THERAPY PASSIVE TRANSPORT

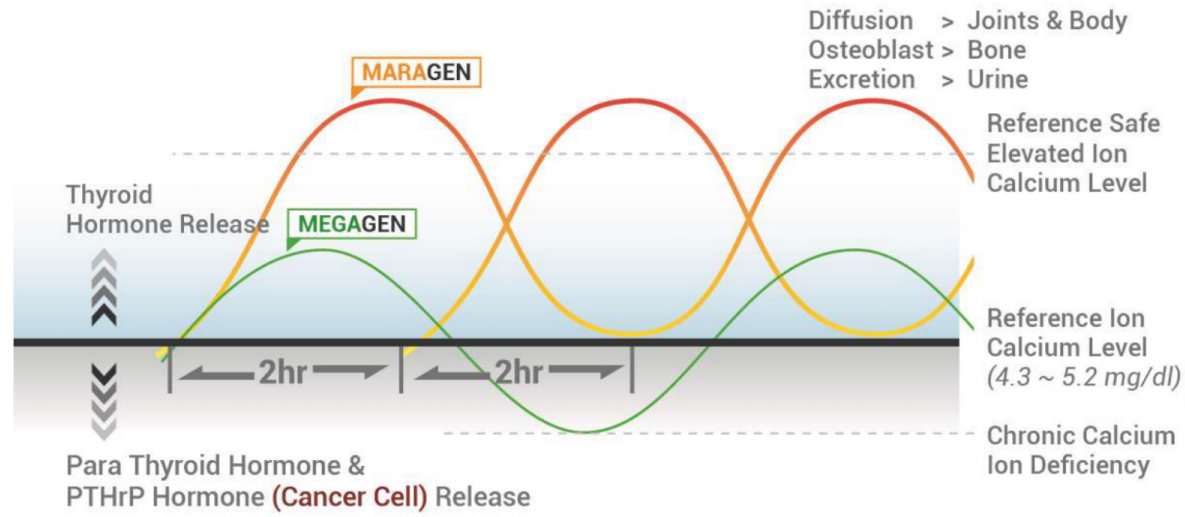


CIT Calcium is directly absorbed because of its anti-orbital-bonding's resulting positive charge, and is immediately bio-available. CIT bypasses active transport delivery that requires digestion with peptides and vitamin D, a complicated process that leaves absorbed calcium far less bio-available.

CALCIUM PASSIVE TRANSPORT

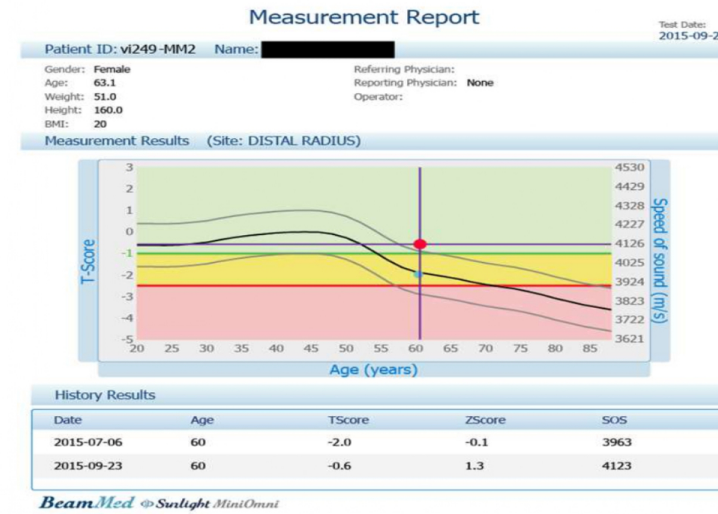


4-6 DOSES/DAY CIT Ca²⁺ LEVEL



CIT IS SAFE AND TRIGGERS MANIFOLD HEALTH EFFECTS

SAMPLE BMD MEASUREMENTS



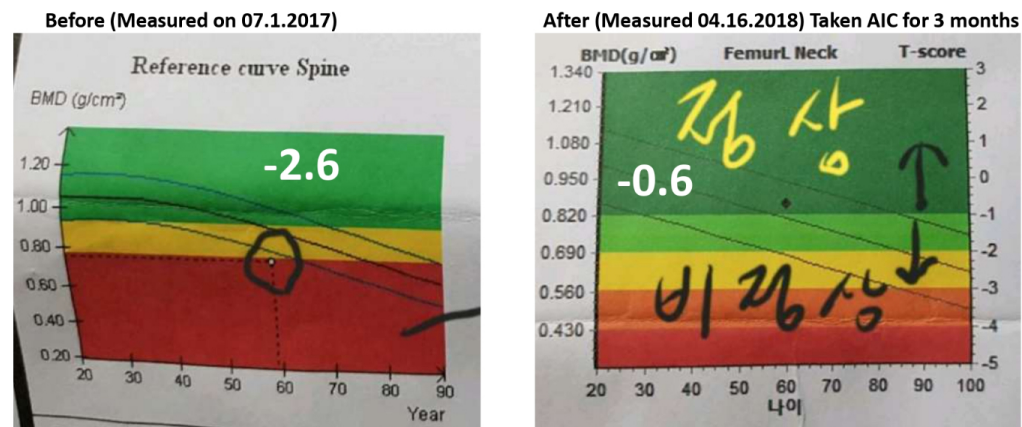
AGE : 60 F

Before : -2.0
After : -0.6

T-Score Increase : +1.4

From osteopenia to normal in 3 months.

SAMPLE BMD (DXA) MEASUREMENTS



The DXA Scan for an Asian Male (60 Years Old) was treated with AIC for 3 months and completely recovered from osteoporosis. (-2.6 to -0.6) T-score increase of 2.

SAMPLE BMD MEASUREMENTS



AGE : 58 F

Before : -1.7
After : -0.5

T-Score Increase : +1.2

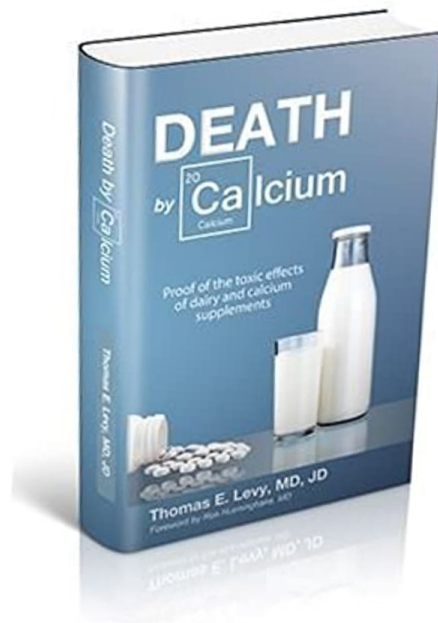
From osteopenia to normal in 5 months.

Dr. Thomas Levy, MD, a calcium expert, states, "While a calcium deficiency is always present in the bones of individuals with chronic disease and is especially severe in those with osteoporosis, it is precisely the chronic loss of calcium from its large bony reservoir that continually feeds the excess presence of calcium elsewhere in the body. Calcium supplementation and excess dairy intake only further fuel this excess extra-skeletal calcium presence." It is actually the chronic loss of calcium from our bones that is causing the excess calcium buildup in our cells. This calcium build-up is causing most of the degenerative diseases we are familiar with, however, there are actually over 150 degenerative diseases that are related to calcification at the cellular level. Subtle dysregulation of calcium ion signals has been linked to some of the major diseases in humans including cardiac disease, schizophrenia, bipolar, Alzheimer's, Parkinson's, ALS, multiple sclerosis, and all of the autoimmune diseases. Doc of Detox Calcium Ion Therapy is the only therapy available that can actually initiate the process to clear this calcification and thereby reverse the conditions that are caused by calcification at the cellular level.

DEATH BY CALCIUM by DR. THOMAS LEVY

"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.

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



DEATH BY CALCIUM by DR. THOMAS LEVY

"While a calcium deficiency is always present in the bones of individuals with chronic disease and is especially severe in those with osteoporosis, **it is precisely the chronic loss of calcium from its large bony reservoir that continually feeds the excess presence of calcium elsewhere in the body.**

Calcium supplementation and excess dairy intake only further fuel this excess extra-skeletal calcium presence."



In summary, when cellular calcification happens there is oxidative stress, calcium signaling breakdown, mitochondrial dysfunction, and cellular inflammation which leads to degenerative diseases accompanied by chronic inflammation and autoimmune responses. This process happens to everyone as we grow older, though it can be reversed with Calcium Ion Therapy. Now that the mechanism and benefits of Doc of Detox Calcium Ion Therapy have been outlined, let's explore how Calcium Ion Therapy supercharges water fasting.

RESEARCH: DYSREGULATION OF CALCIUM SIGNALS & DISEASES

A wide range of Ca²⁺ signalling systems deliver the spatial and temporal Ca²⁺ signals necessary to control the specific functions of different cell types....

Ongoing transcriptional processes maintain the integrity and stability of these cell-specific signalling systems....

However, **these homeostatic systems are highly plastic and can undergo a process of phenotypic remodelling...** resulting in the Ca²⁺ signals being set either too high or too low...

Such subtle dysregulation of Ca²⁺ signals have been linked to some of the major diseases in humans such as cardiac disease, schizophrenia, bipolar disorder and Alzheimer's disease.

Calcium signalling remodelling and disease Michael J. Berridge, Biochemical Society Transactions Mar 21, 2012

Though there are several amazing benefits of fasting, there is one danger of fasting that can actually pose a risk to cardiovascular health – developing atherosclerosis. Your body has a constant requirement for calcium. During fasting, if you lack calcium, your body will break down your bones to take the calcium out of your bones. This moves your body into calcification mode which can cause plaque to build up in your arteries. Taking Doc of Detox Calcium Ion Therapy during a fast will prevent the danger of atherosclerosis and will actually utilize displaced calcium for the body's calcium needs, enhancing the 'clean up' process of fasting.

BONE LOSS LEADS TO **150+ DEGENERATIVE DISEASES**

CELLULAR CALCIFICATION

OXIDATIVE STRESS

CALCIUM SIGNALLING BREAKDOWN

MITOCHONDRIAL DYSFUNCTION

CELLULAR INFLAMMATION



DEGENERATIVE DISEASES

CHRONIC INFLAMMATION

AUTOIMMUNE RESPONSE

OSTEOPOROSIS @ AGE 25

ONE DANGER OF FASTING

Scientific research is finding that skipping breakfast may pose risks to cardiovascular health such as the development of atherosclerosis, or hardening of the vessels in your body. Several studies have been published by the Journal of the American College of Cardiology on this topic. Watch out for cardiovascular disease when you fast.

(Dr. Valter Longo, PhD, An expert in fasting)

Calcium Ion Therapy mitigates calcification factor, and therefore, it should be incorporated for any type of fasting.

In 2016, Dr. Ohsumi received the Nobel Prize for his work on autophagy. As mentioned previously, autophagy is one of the major benefits of fasting; it will trigger cells to break down proteins and all non-essential components in the body and use them for energy. It will destroy invading viruses and bacteria, sending them off for recycling. Cells use the process of autophagy to dispose of damaged structures. Dr. Ohsumi's Nobel Prize work shows that autophagy does not function properly when cancer, infectious disease, immunological disease, autoimmune disease, or neurodegenerative disorders are present. This is related to the disturbance of calcium ion homeostasis. Doc of Detox Calcium Ion Therapy supports the restoration of calcium homeostasis and therefore the full function of autophagy.

Autophagy depends very much on the precise regulation of calcium ions for correct signaling in the body; calcium ion signals either trigger or hinder autophagy. When cells encounter stressful conditions, such as doing a fast, calcium signaling is intensified and elevated calcium levels are required for autophagy induction. When fasting, it is that elevated calcium ion that really starts the process of autophagy. This is why incorporating Calcium Ion Therapy into a fast is so important.

AUTOPHAGY WON NOBEL PRIZE IN 2016 (Dr. Ohsumi)

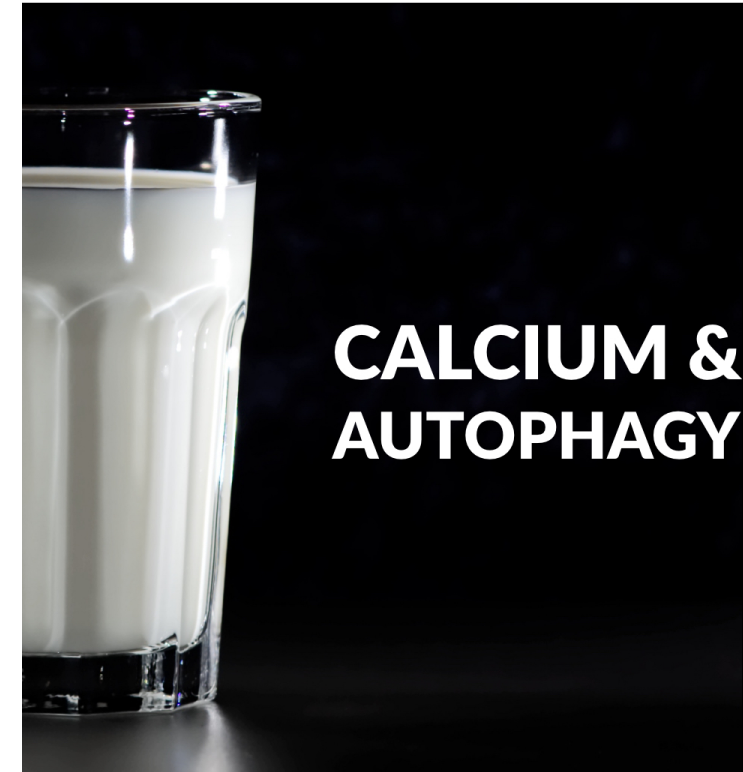
Dr. Yoshinori Ohsumi is a Japanese cell biologist specializing in autophagy and won the Nobel Prize in Medicine in 2016.

During starvation, cells break down proteins and nonessential components and reuse them for energy. Cells also use autophagy to destroy invading viruses and bacteria, sending them off for recycling. And cells use autophagy to get rid of damaged structures. **The process is thought to go awry in cancer, infectious diseases, immunological diseases and neurodegenerative disorders. Disruptions in autophagy are also thought to play a role in aging.**

<All related to disruption of calcium homeostasis>



At Doc of Detox, we have supported tens of thousands of people through Advanced Water Fasting, some with debilitating chronic diseases, and we have seen amazing results where fasting jump-started healing and turned around disease. Though the process of autophagy may happen somewhat during intermittent fasting, Advanced Water Fasting kicks autophagy into high gear. Doc of Detox Advanced Water Fasting uses high-frequency energy medicine therapies – including Calcium Ion Therapy, ATP+, Fulvic Acid, and Ormus Minerals – to move autophagy (releasing the old) and stem cell regeneration (bringing in the new) to a whole new level. All the high-frequency energy medicine therapies we use for Advanced Water Fasting, including Doc of Detox Calcium Ion Therapy, do not turn on the digestive tract; they take no energy from the body, as they bypass the Krebs cycle, and instead create energy within the body to optimize fasting, minimize detoxification symptoms, and make the entire fasting experience comfortable and easy.



CALCIUM & AUTOPHAGY

Calcium (Ca^{2+}) has been shown to control various stages of autophagic flux.

Cytosolic Ca^{2+} signals can trigger autophagy, but can also inhibit autophagy too.

Different Ca^{2+} channels and Ca^{2+} sources have been shown to impinge on autophagy.

Buffering cytosolic Ca^{2+} with BAPTA blocks induction of autophagy by almost any means, **indicating that Ca^{2+} signalling is essential.**

Autophagy and apoptosis share many of the same Ca^{2+} signalling toolkit components.



REGULATION OF AUTOPHAGY BY Ca^{2+}

Tumor Biol. (2016) 37:15407–15476
DOI 10.1007/s13277-016-5353-y

REVIEW

Regulation of autophagy by Ca^{2+}

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Abstract Autophagy is an evolutionarily conserved lysosomal catabolic process used as an internal engine in response to nutrient starvation or metabolic stress. A number of protein complexes and an intricate network of stress signaling cascades impinge on the regulation of autophagy; the mammalian target of rapamycin serves as a canonical player. Ca^{2+} , as a major intracellular second messenger, regulates multiple physiological and pathological functions. Although significant in-

Introduction Autophagy is a main catabolic process of degrading and recycling intracellular components in lysosomes that cannot be executed by the ubiquitin-proteasome system. These components include long-lived proteins, damaged organelles, and some other macromolecules [1, 2]. Under well-fed conditions, autophagy in most cells is maintained at a low basal level.

For the most effective fasting results, start on Doc of Detox Calcium Ion Therapy at least four weeks before starting a fast. In addition, eat a whole plant-based Perfect Day diet, take foundational nutraceuticals, structured water, and practice the exercises that open up the pelvis – the pelvic activation squats and the pelvic enhancer stretch – to increase and open up microcirculation. This activates the detoxification of the colon and liver.

When prepped in this manner for two weeks to four weeks, people will typically be able to stay on the Advanced Water Fast longer and achieve even more profound results. People who doubted their ability to maintain a fast will move through it like on a 'magic carpet ride'.

As stated many times before, the invisible always creates the physical. This is true whether we are speaking on an emotional or physical level; the invisible calcium ions create the opportunity for profound physical healing within the body.

Doc of Detox Calcium Ion Therapy is the missing link to an enhanced, more enjoyable, and more successful water fast! Unleash your power to heal!