



THALASSO THERAPY
SAVING BEAUTY AND PRESERVING YOUTH

THE LONGEVITY REVOLUTION



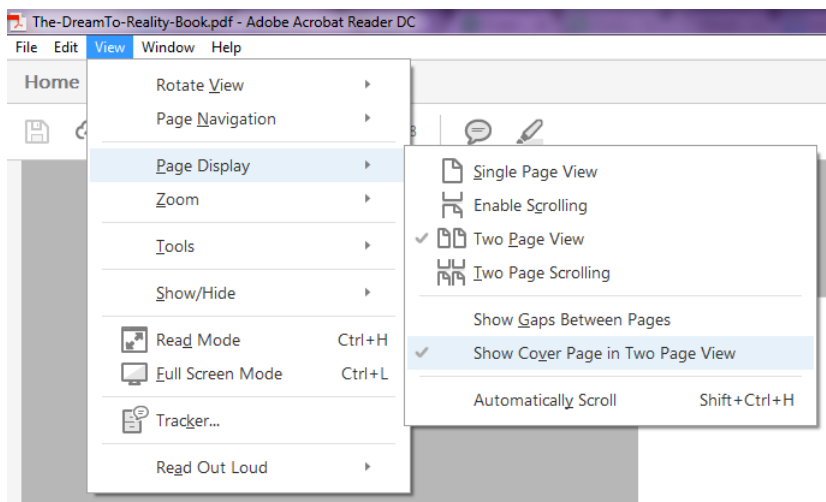
ANTOINETTE MARIE MARQUEZ

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THE LONGEVITY REVOLUTION



THE ART OF AGING WELL

Antoinette M Marquez



books

THALASSO THERAPY



SAVING BEAUTY AND PRESERVING YOUTH

Antoinette Marie Marquez

“If we were as enamored with water as intensely as we are with food,
health would be an epidemic.” - AM



Thalasso Therapy: The Longevity Revolution
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COVER DESIGN by Vector Designs
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WHAT IF:

- What if there was a way to enhance the quality of life and live “well” beyond 100?
- What if we could turn the clock and experience a new healthy aging model?
- What if you could have more dominion over your behaviors and habits?
- What if it were possible to end illness, prevent the loss of youth and sustain beauty?
- What if we were to return to our hunting and gathering roots to combat illness and promote a new way of life?
- What if we could skip the frail and elderly years by remaining vibrant beyond the age of 50?

Come with me so I can show you how to Sea life –

A NEW WAY!

FORWARD

M. Lynn Cornish
BSc. (Agr.) and MSc. Biol.(phycology)



It is both ironic and appropriate that Antoinette would ask me to write the forward to this book as I was absorbing the sea air and recharging my physical and mental batteries on Las Canterras Beach in Las Palmas Gran Canaria. Not until I actually made my way to the beach did I realize I even needed recharging, but something about the Sea, the waves crashing on shore, and all the little marine molecules penetrating my skin and entering my nostrils made me feel so healthy, alive, and beautiful. I have known Antoinette only a relatively short time, and her passion for all things marine and her profound energy and desire to research and share the benefits of Thalasso therapy, seaweeds, and calorie reduction with respect to health, wellness, and beauty is impressive. We met through our mutual fascination of seaweeds, as I have worked within the seaweed industry for over 20 years, and have published a number of reviews of the scientific literature about the extensive benefits associated with them. Antoinette, on the other hand, has effectively and energetically provided what we would call in science terms a “model organism”, in that she puts all her claims into practice, providing clear evidence of the benefits of sea baths, seaweeds, calorie restriction and all things marine. Her research provides further insight into the background and the therapeutic merit of these practices. The sea is fundamental to our existence, from the beginning of time to the present day we remain connected to it. As I sat on the beach and

watched infants who were just able to crawl make a beeline for the ocean time and again, with parents dashing after them, carrying them back onto the beach, I thought how natural the sea must be for us as humans. Indeed, as early hominins made it to the coasts of Africa and gained access to marine nutrition, the prevailing theory contends that this was the trigger for the development of our bigger and more sophisticated brains. We may never truly know the answer to that, but the empirical evidence is all there, and the logic around this theory is indisputable. With respect to calorie reduction, it has been scientifically demonstrated time and again that we eat far more calories than we actually need to sustain health and wellbeing. Once we become adults, we no longer need to add calories for bone or organ growth, and a maintenance diet, if balanced nutritionally, need only be of minimal calorie content. The words in this book simply make sense, and if only a portion of those who read it achieve health, wellness, and personal beauty, then I feel it has done its duty. We make our own decisions in life, and we live with the consequences, so it is up to us to tip the balance as best we can towards health and wellness. This book is entertainingly written, and it provides some valuable strategies for enhancing our physical, spiritual, and mental welfare.

I AM SURE YOU WILL ENJOY IT!

DEDICATION PAGE



My deepest gratitude is offered to my loving husband who has been my hero, my prince charming, my support and my ever steady rock. His unwavering love combined with moment-to-moment support and dedication keeps me on track ever so often. Without him my book, my systems and my mission may not have ever come to fruition. For that I will always feel deeply blessed to have the creative space to walk my path and realize my true life's work.

Daniel always holds the string so my feet never have to be on the ground and my head can always be in the clouds.

This book is dedicated to
the love of my life Daniel Marquez.

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THE LONGEVITY REVOLUTION

THE ART OF AGING WELL



*What we all need is a
big dose of Vitamin Sea! AM*

INTRODUCTION TO THE ART OF AGING WELL

My entire life has been dedicated to facilitating healing, teaching fitness and learning how to nourish the human system properly. As I move through the years, I find myself looking for smaller, simpler and smarter solutions to life's consistent questions. Holistic practices such as Thai medical massage, yoga, martial arts, Ayurveda and eventually Thalasso therapy have been my “educators.” These ancient systems have become my constant companions that accompany me throughout my life.



As a young girl, martial arts entered my life, helped me protect my physical body, and played a huge part in the development of a strong self-worth. Yoga set me on the road to self-healing and helping others do the same. When age left me with a desperate to protect my youth and beauty, I found myself swimming into the world of Thalasso therapy. Thalasso therapy introduced me to the concept of self-preservation, skin fitness and the path to healthy aging.

As 50 inched itself my way, it occurred to me that I was not prepared for the aging process. For most women, the decades beyond 40 can be a scary time in life, myself included. Each year seems to come a little quicker and age overcomes us fast, hard and without mercy. Suddenly our exterior no longer matches our interior, and as a consequence negative self-judgment puts many women on a path that accelerates the entire degenerative process.

Aging is no fun. It can wreak havoc on self-worth, eat away at a positive body image and instill a diminished sense of self. One day we realize we don't look so good; in turn this makes us not feel so good. Before we know it, disengagement with others becomes a much better option than facing the emotional backlash of harsh self-shaming.



As if that were not enough, many will find that as 50 gets closer: intimacy becomes a chore, erotic confidence gets lost and nudity seems to slip away from daily life. Touch, affection and tender moments are typically not far behind. Health, intimacy and beauty are all inter-connected. The loss of any can lead to an avalanche of psychological and physical concerns that keeps health at risk.

Today anti-aging, longevity and the preservation of beauty is on the mind of a generation for whom 50 is a reality. When 50 could be seen from my own front porch, I knew I would not be willing to succumb to the common corrosion and decay we typically associate with “getting old”. Something inside me realized that I was never taught the Art of Aging. Time was not something I was prepared to face, but I knew there **HAD** to be a way to move through time while maintaining at least a little bit of grace.

A LONGEVITY REVOLUTION CAN SUSTAIN BEAUTY AND MAINTAIN YOUTH!

From my past experiences, I am very aware of the physical damage that we all succumb to as result from physical inactivity. I know how to bring a body back into a state of homeostasis. But what about skin? In all my years, I received zero training or education to prepare me for age related dermal degeneration that includes: dermal atrophy, collagen deterioration, reduced cell turnover and decline in the DNA repair mechanisms. Of course we have the common knowledge of: hydration,

eating well and getting plenty of rest. That's all fine and good, but what happens when that is not enough? Do we just sit back and superficially monitor the wrinkles, bleach the dark spots and consistently visit the Medi-spa?

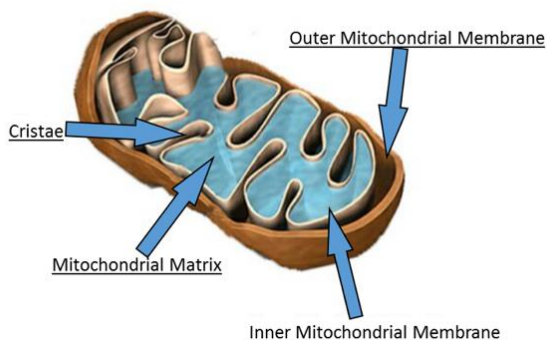
**THALASSO THERAPY PUTS YOU IN CHARGE
OF YOUR BEAUTY THE SAME WAY EXERCISE
PUTS YOU IN CHARGE OF YOUR FITNESS.**

As we age, we are all aware that we must be more attentive to our diets, and somewhere around the age of 34 normal exercise just doesn't cut it anymore. By the age of 40, if you wish to see positive physical results from your workout routine, you must go all out and kick your own ass on a regular basis. Why would cellular function and dermal systems be any different?

Maybe it's time to throw skin a life preserver capable of ushering in an "age" that includes sustainable beauty, maintainable youth and a new healthy aging model. We have come to understand age as a passive process, an action that just happens to us and something beyond our control.

Once upon a time, health and wellbeing were also passive. Then we organized physical activities into strenuous exercise and eating into intentional nutrient modification. Suddenly we could regulate health and wellbeing. Dieting and exercise are processes of manipulating our systems via hard work and nutritional modification therapy. A competitive athlete is a perfect example of results that may be achieved via calculated physical activity paired with precise nutrient modification.

The Mitochondrion



Thalasso therapy utilizes marine elements, water techniques and active participation in self-preservation rituals to reveal an opportunity for radical life expansion that can profoundly alter our personal

experience of youth, beauty and the aging process. Thalasso therapy turns to nature's own abundant regenerative products that play an essential role in pushing our longevity possibilities. Bathing in nutrient waters encourages dermal gymnastics. This is achieved through: mass cellular regeneration, enzymatic suppression, protein modulation, osmosis, collagen/elastin stimulation and DNA repair. During Thalasso therapy treatments, mass osmosis permeates mal-nourished and dehydrated dermal layers with a cornucopia of essential minerals and nutrients. This action flushes toxins from the system, stimulates cellular activity and resets molecular longevity pathways. When the clutter, dirt and toxins are removed, it gives way to optimal cellular performance. When things are clean, nourished and active, the system simply works better.

SKIN IS THE LARGEST ORGAN OF THE BODY AND SERVES AS AN INDICATOR OF HARMONY WITHIN THE SYSTEMS.

It is entirely possible to “turn on skin” with proper nutrition and water fitness programs that turn to marine properties and natural environments. If we can diminish bad health and improve physical conditioning through exercise and proper nutrition, then it is entirely possible to sustain beauty and maintain youth via self-preservation rituals. If we can shift the aging process beyond a passive, inevitable

state, maybe we can offset age-associated disorders and avoid the frail elderly years all together.

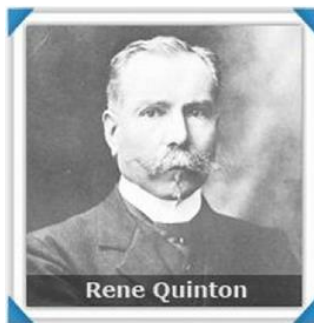


INTRODUCTION TO THALASSO THERAPY

Thalasso and Thalassotherapy are words of Greek origin: Thalassa means sea and therapy is a healing treatment. Throughout antiquity Greek people were known as a seafaring community who put tremendous faith in the healing powers of the ocean and the marine environment surrounding their peninsula. The composition of the ocean is ever constant and it has changed little over 1.5 billion years.

Thalasso therapy is the medicinal use of seawater, marine climate/environments, seaweed, sun, salt and other marine ingredients to promote a healthy aging process through self-sustaining rituals that include natural surroundings. Thalasso therapy is a traditional preventative therapy that emphasizes self-preservation treatments and curative approaches. Thalasso sits at the heart of the history of medicine, pharma curatives, medical treatments and spa techniques.

Plato, Euripides, Aristotle and Hippocrates all proclaimed the curative and healing powers of the ocean through the “taking” of the waters. In the centuries following these great thinkers; knowledge of the powers of the “waters” would increase and spread. This natural know-how would stir up European water wars and invoke Holy Water. Dr. Richard Russell’s penned a book in 1750 that proclaimed the waters of Europe “a cure for all that ails modern man.” A theory and homeless dog would give Dr. Rene Quinton, the scientific validation to verify that seawater composition closely matches mammalian plasma. For the next 200 years, seaside mania would ensue. Some may even argue that the water “madness” never truly ended. It is estimated that 500,000 water lovers will enjoy thalasso treatments in France this year alone



This manual is a culmination of my 30 years of experimentation, application, hands-on trials and personal growth that developed into my own American Thalasso therapy company, which consists of a 25-acre sea farm, skin fitness programs, spa techniques, a line of longevity-promoting products, retail showroom and FaceBar in Santa Barbara, CA.

When “age” knocked on my door, I was not about to go without a fight. I was determined to solve this thing called “aging”. Thalasso therapy has become my saving grace and lifelong obsession on my journey to find my own personal fountain of truth. This manual serves as my opportunity to share my findings with you and invite you into a thalasso world capable of sustaining beauty and maintaining youth.



Thalasso therapy calls upon your spirit of open-mindedness to fathom the possibility that seaweed and seawater can be used as organic mediums capable of balancing human internal environments.

**INITIAL WORDS FROM
CONTRIBUTING AUTHOR
Irene Eve Nagle Reyzis, MD, MPharmSc**

As a healthy living advocate, environmentalist, gardener and outdoor enthusiast, I consider myself to be very in tune with the natural world. Yet the process of contributing to this book has caused me to realize the immense distance that modern life has taken human beings from natural waters. Most of us are not coastal dwellers, but even those of us who are I would guess hardly find the time to step out of our busy lives and make way to the shore for real one-on-one time with the blue depths. In big cities along the coastline I picture office-dwellers just like anywhere else, driving home on the highway looking out onto the vast waters that have lost meaning to many of us as a source of life-giving elements. For inland dwellers, the disconnection is often much greater, and the sea's qualities that made it host for the origins of life are for the most part completely forgotten. A piece of fish or a roll of sushi shows up on our plates from time to time, a dash of sea salt on our dinner, and that's about the extent of reunion that most of us experience.

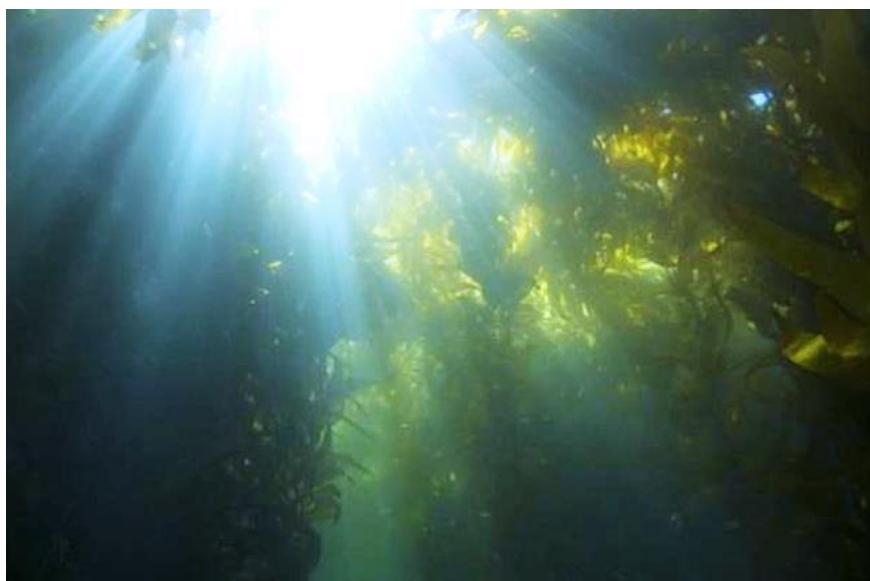
The investigating and researching of marine products I did to contribute to this book taught me a lot about the potential health and beauty benefits that lie hidden in the sea. It caused me to raise my head in wonder and tilt it in respect for a part of nature that has more healing capacity than I would have ever hypothesized had I not been introduced to the concept of Thalasso therapy by the primary author Antoinette.

When I first tried whole seaweed in my own beauty routine, I wasn't sure how much it would really add to my self-care experience. The effects I have to attest were both immediate and astounding. My skin became more luminous and bright with major redness reduction, but even more notable I felt whole-body invigoration without being stimulated like you would with caffeine or even peppermint. Beyond just having smoother, softer, more hydrated and toned skin, with just my first thalasso bath I had a feeling of true healthfulness from the tip of my nose to the ends of my toes. When I felt and looked at the pieces of rehydrated seaweed

in my hand, it was truly serendipitous when the simplicity of it all really struck me. "The surface of this red seaweed is oozing with seaweed extract, a very coveted cosmetic ingredient, but it's in abundance and being created before my eyes. This is what *real, raw* red seaweed extract looks like" I thought.

Being an expert in the cosmetic ingredient world for quite some time, I've come across kelp, algae and seaweed extracts as ingredients for reviving skin health and increasing cellular vitality. Specifically, I've known red seaweed to be heralded for its ability to increase microcirculation and enhance oxygenation of skin tissues. However, prices for such ingredients are not exactly permissive of high concentrations in skin care products let alone in bath water. Yet there I was, making my own through the simplest concept of just rehydrating the dried raw plant taken straight out of the ocean. I didn't need to depend on an ingredient manufacturer to extract, preserve and bottle the material in order to benefit from it. The simplicity and yet the efficacy and user-friendliness intrinsic to the whole concept is still something that blows my mind. Treating the skin and body in a healthful way using marine products is the essence of Thalasso therapy, and this book harbors a sea of information to educate readers on how to use it for their own self-care

CHAPTER 1:
THALASSO THERAPY
SEA LIFE – A NEW WAY



“We are tied to the ocean. And when we go back to the sea, whether it is to sail or to watch - we are going back from whence we came.”

- John F. Kennedy

KELPING BEAUTY

It is possible to return skin to its youthful vibrancy by rejuvenating our dermal layers to their original architecture, and restore the external body to its once youthful vitality, regardless of age. Sounds like something from *The Twilight Zone* - right?!

Reversing aging is our new health and wellness frontier, and longevity is the new game in town that everyone wants to play. Let's say, just maybe, internal collagen production can be stimulated and DNA can self-repair, just like our abs.

**IT IS POSSIBLE TO GET BACK THE SMOOTH AND
BEAUTIFUL SKIN WE ONCE HAD.**

A NEW AGE

2015 was our scientific year of skin. It came in like a ninja, without any fanfare or notice. Unless you follow Nobel news, you would have never known about one of the biggest beauty breakthroughs the world has ever seen. Decades of skin cancer research, dermal stem cell harvesting and clinical trials for genetic therapy; skin everywhere received unforeseen benefits. Science verified that just like health and wellbeing, youth and beauty could be manipulated through detoxification and dermal nutritional therapy.

Longevity is no longer a big secret and science has verified “new”



methods that increase lifespan in a variety of organisms. Today there are many who swear by these methods, myself included. It is possible to optimize skin metabolism by putting skin on a diet and kickin’ its little cellular ass. Thalasso therapy provides skin with water rituals that

rejuvenate, nourish and detox in a way that parallels whole body cleansing programs and even the most exhausting workout regimen. Thalasso therapy provides detoxifying rituals that take place in a non-stressful manner, while simultaneously nourishing the system to promote optimal dermal function and cellular activity.

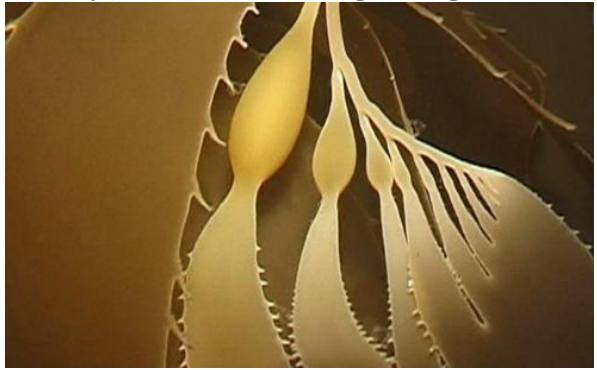
In October, 2015 the Nobel prize for Chemistry was awarded to Tomas Robert Lindahl Ph.D., Paul Modrich Ph.D. and Aziz Sancar Ph.D. for proving that just like a bad back, DNA can be repaired. This scientific trio revealed our own internal tool box capable of performing automatic DNA reconstruction. Talk about self-care at its finest! We now have scientific verification that skin can be rescued.

When we were young our skin knew how to auto-repair and cell regeneration was a natural occurrence that happened rather quickly. Thalasso therapy is a system of natural routines, simple rituals and maintainable daily practices to clear cellular toxins that get in the way of optimal cellular activity, so skin can get back to being young again.

An effective way to achieve detoxification is immersion in a nutrient, mineral-rich bath, where osmosis forces homeostatic effects on the systems of the body. As the body receives its necessary essential elements, the systems goes into cellular boot camp. Like a fine meal, the body does not know how long the feast of minerals will be available. The system quickly sets out to assimilate the nearly-identical blood serum composition into our own plasma. Every cell gets out its tiny little straw and quickly sets out to suck up all the good stuff. During a bathing

therapy oxygen floods body tissues due to the vacuum action caused by evacuating lymph residue and toxins, as they rush to get out of the system. As dermal cells are irrigated with nutrients, function improves and cellular growth resumes. Things are again as they once were. Integumentary (skin, hair, nails and glands) function can be reinstated to be as good as when we were young, if not better.

Physical exercise has already proven that we can get our game back. How many of us have felt better than we did when we were in our 20's after adopting a fitness routine that pushes our stamina and challenges our endurance? Just like exercise, Thalasso therapy can turn back time to reveal a new you. Thalasso therapy blends beauty and health to create a unique longevity strategy that cultivates youth, wellbeing, personal self-confidence and a lifelong positive body image.



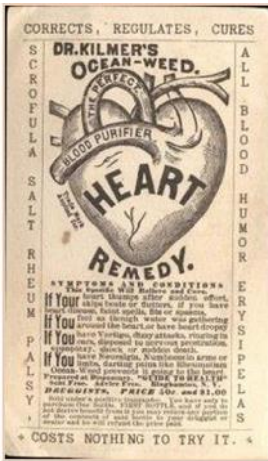
WATERMEDICA

A History of Water Medicine

Based on evolution through 2000 years of technique development, installation of water centers, experimentation, observation, participation, research and personal testimonials, Thalasso therapy has emerged as a simple solution to the pathologies that plague modern civilizations and jeopardize long term quality of life. The medical and pharmaceutical virtues of marine products have been verified many times over.

BEFORE THERE WAS PHARMA - THERE WAS THALASSO!

During the 1700-1800s many turned to water as a natural medicine



complete with verifiable therapeutic benefits. In the 1700s France revived an ancient marine system and eventually coined it Thalasso therapy, treating it as a national treasure. France soon developed and installed seawater heating facilities. Within half a decade seaside health centers began to open along the coast of France. These centers were luxurious medical facilities that offered Thalasso therapy treatments for rejuvenation, beautification, slimming and relief from health conditions such as tuberculosis. Soon French people from

all walks of life would utilize Thalasso therapy as a treatment of choice for joint troubles, respiratory issues, injuries and bodily imbalances that were becoming more common due to modern lifestyles.

Many with illness, disease and degenerative disorders turned to various natural medicinal waters. It was commonly understood that the sea, springs, rivers, lakes and wells supplied natural medications that

served as healing tonics and provided curative solutions for recuperation from physical ailments.

Bath, Epsom, Cheltenham, Baden-Baden, Selters and Spa are names of towns that were originally praised for their rejuvenating waters and their curative therapies. The numerous fountains that can be seen across Europe were originally purely functional. Water fountains once served as part of the irrigation, drinking, bathing and medicinal water delivery system.

Stress relief has always proven to be a reason to get away from home and escape from the rigors of daily living. Due to the era of exploration, in the late 1700s global tourism became more accessible to the common person. Soon health resorts and seaside spas became the #1 destination locations for tourists. Health tourism in the 18th and 19th centuries became the primary purpose for travel. As a result, resorts popped up in Europe to meet the demands of a lucrative new industry. To attract tourism, cities would boast about the benefits of their water and build elaborate fountains, bathhouses and natural swimming holes to enhance their visitors' experience.

Doctors would prescribe a visit to the waters of specific towns for the purpose of physical healing and psychological rejuvenation. Health maintenance was the new holiday. Thalasso therapy soon found itself jetting across Europe. This led France to begin the International Congress of Thalasso Therapy. The 1st Congress of Thalasso Therapy took place in France in 1908. The purpose of the congress was to discuss the efficacy of treatments for tuberculosis, joint and bone maladies and other healings that occurred at seaside resorts and Balneo therapy facilities (Balneo is the treatment of disease by bathing, often in mineral springs and practiced most frequently in spas).

Thalasso therapy was originally developed and adopted by the French



as a preventive health option and natural wellness lifestyle. Thalasso therapy enjoys a rich French history that is over 200 years old. In the early 1800s mainstream France recognized sea bathing as therapeutically

beneficial and crucial to longevity, health maintenance and healing. By 1869 the term Thalasso therapy was commonplace and the system was established as a viable healthy living practice. Later in the year 1960, Thalasso therapy was classified as a bona fide medical treatment in France. The use of seawater, seaweed, sea mud and other sea resources that included the marine climate was approved as a medical treatment that rendered medicinal effects.

The French healthcare system has turned to Thalasso therapy for over 200 years for:

- Sore throats
- Digestive illnesses
- Arthritis
- Muscle and skeletal injuries
- Respiratory concerns
- Developmental disorders in children
- Endocrine imbalances
- Dermal conditions

It was verified that when doctors prescribed Thalasso therapy, it kept citizens well, at work and most participants consumed 40- 60% less in healthcare costs over the 6-12 months following their treatment. In France Thalasso therapy was adopted as a preventive method of keeping health care costs down and people healthy. Most citizens were encouraged to visit a thalasso center two times a year as a health maintenance obligation to their country. For 2000 years Thalasso therapy was used mainly as a healing technique, in 1964 it became a fad, and today many like me see it as a way of life.

Thalasso therapy had its American moment on September 13, 1934. At the 13th Annual Congress of Physical Therapy, Dr. Singer presented a review of the history of Thalasso therapy. In his lecture, he took the audience from antiquity to the modern movement and, in particular, Margate Royal Sea Bathing Hospital. Unfortunately, his definition was too narrowly defined, and the result was that Thalasso therapy fell into American obscurity.

The Margate Royal Sea Bathing Hospital opened in England in 1791. A sea bathing hospital was a vision of John Lettson (a Quaker physician for London's poor) who had an unwavering belief in the curative powers of the sea, sun, ocean spray and marine climate. Margate closed in 1996. In 2014 Margate was purchased and turned into an apartment building. The facility was an open-air seaside hospital that



successfully treated patients with tuberculosis and other respiratory illnesses for 200 years. Dr. Lettson was the laughing stock of the medical community until open air treatments for tuberculosis became standard. Then he was considered a visionary.

Over the years physicians researched, observed and participated in seaside centers and thalasso treatments in order to personally test their validity, set appropriate guidelines based on their professional experiences, and put each facilities' medicinal claims to the test. Sick patients would be sent to various facilities for monitored clinical testing and health observation. During the Thalasso therapy congress, physicians, scientists, scholars, patients and royalty delivered their clinical, private and research derived results in an attempt to establish Thalasso therapy as a viable supplemental medical option for health and wellbeing. Thalasso therapy comes from an era when doctors put great faith in the curative powers of natural resources and promoted their use among patients.

As of the late 17th century health resorts and seaside centers were taxed by the government and the money from the healing experienced at these destinations soon supported new roads, bigger fountains and

more elaborate bathhouses. Thalasso therapy quickly became a global luxurious indulgence and health was suddenly paying the bills for cities to expand and develop new avenues of revenue.

MODERN THALASSO THERAPY

SEA ME

Sustaining beauty and maintaining youth was not at the front of my



mind until I began seeing the signs of aging right before my eyes. When the wrinkles suddenly showing up, my skin started sagging and dark spots came out of nowhere, age suddenly became my constant concern.

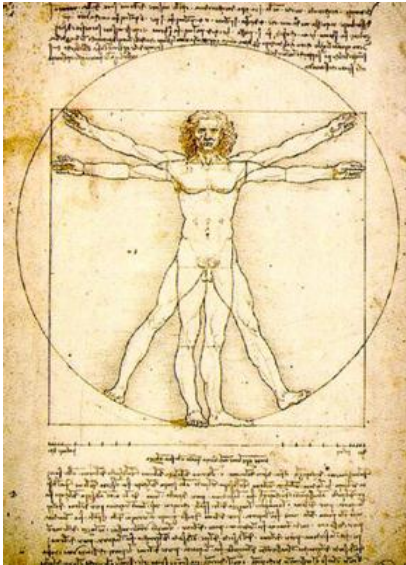
Shortly thereafter I found myself hanging out in the skincare aisle like a deer in headlights. "Choose wisely" became the mantra for my skincare and beauty product purchases. I have always been careful when it came to my diet. I felt the need to pass that same concept onto my skin. What I found in front of my face was: empty promises, too many choices and so many dangerous ingredients. I was far from being a happy camper traveling down this new road I saw before me.

I have always taken a proactive role with health maintenance and personal wellbeing. We know we must exercise and consume good food if we are to stay healthy. For some reason this doesn't automatically foster sustainable beauty and maintainable youth. In my new antiaging world, I had to trade in my gym membership for biweekly visits to the Medi-spa. This new "gym" proved to be one more allopathic method that did not promise long-term results. Just like with medication and exercise, if you want long term results, you have to keep showing up to the beauty spa. For me this was no answer at all.

A modern thalasso seeker can find an experience with thalasso therapy beauty treatments at many of today's high end spas or

destination health resorts. Beyond that, thalasso theory suggests a shift in lifestyle that embraces beach, sea and ocean as healing mediums and original medicines. Thalasso therapy can nourish its devotees from the bounty of the sea by providing an essential medicine, nourishment and abundant beauty supplies. Thalasso therapy is a lifestyle choice and a beauty maintenance system that directly addresses sustainable youth by tapping into our world's greatest natural wonder. Inviting self-preservation rituals of Thalasso therapy into your skin beauty routine is just like changing your diet or workout program to achieve better results. Thalasso therapy uses marine ingredients to improve the body's natural healing processes and encourage our dermal barrier to auto-repair and function as it did when we were younger.

Modern science is finally catching up with history. We are re-learning what our ancestors understood as a common health practice and natural lifestyle choice. Over the last two decades we have become privy



to a mountain of information regarding the body, which has led many to believe that answers for today's concerns must be found in science and technology rather than empirical know-how and ancestral practices. The funny thing is that efficacious ancient practices always seem to find a way to slip back into our consciousness. Today, MMA resurrects martial arts training for a new generation. Yoga studios offer classes next to Starbucks and many of us still turn to acupuncture, Chinese and Ayurvedic therapies as

alternative or supplemental healing options.

The current rush to holistic or self-healing techniques has brought to light the many lesser illnesses of our age as the real evils that disrupt balance and jeopardize longevity. Fatigue, stress, depression, obesity,

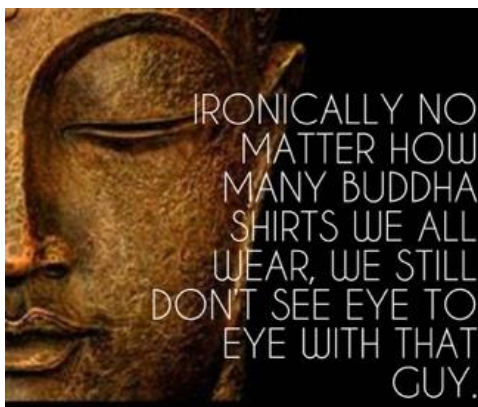
digestive disorders, arthritis and chronic back pain are the slow, silent killers that turn the years beyond 50 into frail and degenerative times. French physicians have always known that life is aggressive and people should step away from their daily hectic routines as a regular practice and reconnect with nature.

WHAT IF IT WERE POSSIBLE TO PUT AN END TO ILLNESS?

Doctors, health experts and holistic teachers agree that the best way to fight disease is to prevent it in the first place. Optimal health begins and daily living habits that are adopted as simple solutions for everyday wellbeing. Yet half of the population is living with chronic conditions complete with life-disrupting disorders. For most of the population, we all prefer to live for today and assume we can just pay the gatekeeper later.

Prevention is always a hard sell. As a lifelong teacher, I have spent far more time explaining the long-term benefits of maintaining physical activity and good nutrition than any other subject in my entire life, current works included.

This might lead one to ask, why is it so hard to convince others to do good?



Thalasso therapy calls upon our underdeveloped personal skills of independence, self-motivation and self-reliability to help us safely move past the landmines that life will inevitably throw us. Age can only come with grace when we practice self-reliance and personal wisdom. We really do know what is best for ourselves. Once we tap into personal

enlightenment we can become our own best keeper. When it comes to a new aging model, it will take time to move beyond our fears, doubts and self-defeating conditioning from early upbringing and past experiences.

There was a time that flight seemed impossible and cloning was laughable, so it is no surprise that now we are starting to look at longevity possibilities as an achievable feat.

The 8 sea-cret benefits of thalasso therapy:

- Rebalance energy
- Relieve stress
- Restoration of skin firmness and suppleness
- Slimming
- Stimulates circulation
- Restores mobility and alleviates painful joints
- Back detoxification
- Preparation for/recuperation from physical activity



Thalasso therapy is no doubt our best modern opportunity to include beauty into a whole health and wellness model. Thalasso therapy utilizes abundant natural resources provided by marine environments that include: seawater, sun, wind, fog, mist, algae, sea vegetation, mud, sand and salt. Ancient coastal dwellers knew of the

healing powers of sea environments. Beneficial marine water can be found deep in the roots of most religious traditions - How about that Holy Water? You would be hard pressed to find an ancient culture not developed around a large celebrated body of water.

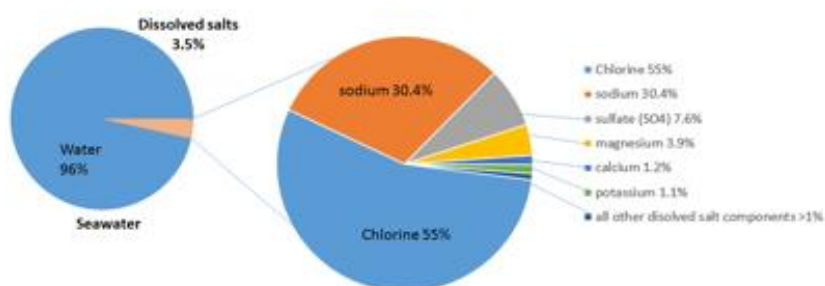
Thalasso therapy practices are healing tools that slip us into the primordial waters of an earthly womb. Thalasso therapy’s basic principle is daily reconditioning and mineralization, as a way to charge your own personal battery to maintain internal power. Today most of us find ourselves isolated from nature; even the act of going outside has become a necessarily conscious effort. Thalasso therapy turns to abundant natural resources as a beauty “gym” and “eco-spa” as part of a self-preservation program that promotes a new aging “well” model.

Seawater is our greatest elder and a mysterious solvent that puts us in touch with elements that have been here far longer than us. Seawater is nature's most fundamental cleaning element that continues to be overlooked as an organic medicine.

According to French doctors, Thalasso therapy keeps its promises. It was estimated that eight days of thalasso “curing” lasts six to eight months. Thalasso therapy utilizes elements capable of organically harmonizing mind, body and spirit as it helps us to see a connection between health, wellness, beauty and the natural world.

Seawater closely matches the minerals, electrolytes, trace elements

Dissolved Components In Seawater



and vitamins present in human blood plasma. Our bodies use proteins called enzymes to facilitate function and they depend on availability of minerals and vitamins in the body to do their job correctly. Most enzymes require coenzyme factors and these are usually one or more naturally-occurring minerals commonly found in seawater, seaweed or

sea salt. This renders seawater a therapeutic tonic compatible to the human system.

Thalasso rituals bestow beneficial properties of the sea upon skin cells to promote oxygen exchange and mineral absorption while simultaneously expelling toxins from the body. All human body components require particular mineral elements as part of their respective structure and functions. Simple examples include: blood requires iron and thyroid function requires iodine. Without appropriate substances, the body will not find a state of homeostasis. Many health issues can arise due to prolonged imbalance of the internal environment.

Chronic dietary shortages of essential minerals can lead to specific and general diseases, illness or simply untraceable complications in daily life such as:

- Chronic fatigue/exhaustion
- Lack of energy - lethargy
- Clinical depression
- Chronic pain
- Headaches
- Temperature sensitivity: hot/cold spells
- Muscle aches/cramps
- Brain fog/reduced ability to concentrate
- Suboptimal immune function
- Lack of drive/motivation

Thalasso therapy is ancient know-how that evolved from empirical knowledge. Empirical knowledge is when a conclusion is drawn based on the senses through experimentation, participation and observation. It is the gathering of evidence through personal experience to justify a solid claim of truth or to prove something false. For example, it is modern empirical knowledge that processed food is bad for your health. Do we need a scientific test to prove that sugar and deep-fried chicken nuggets are not good for you? Luckily France blended common sense, clinical studies and scientific research to verify the efficacy of Thalasso therapy

as a self-preservation system that can keep your physical, psychological and emotional states optimally functioning.

The premise behind Thalasso therapy treatments is that with repeated immersion in seawater, sea mud and/or mineral-rich kelp/algae/seaweed, the body's natural chemical balance is restored. When we are immersed in warm seawater or seaweed, dissolved minerals and nutrients are absorbed through the skin and many will enter the system more optimally than internal digestion.

Thalasso tools include, but are not limited to:

- Ocean/bath/hot tub/salt water pool
- Seawater
- Halotherapy - the therapeutic use of sea salt
- Heliotherapy - the therapeutic use of sunlight
- Argo therapy - the therapeutic use of algae/kelp/seaweed
- Fangotherapy - the therapeutic use of sea mud/sediment/clay
- Eliotherapy - the therapeutic use of marine climate and the inhalation of aerosol-size particles of seawater
- Underwater showers, table top shower massages
- Kinesiotherapy - physical therapy promoting range of motion, may be done floating in the sea or a sea pool
- Aquatic therapy - exercising in the water such as sea swimming, surfing, or water aerobics
- Sea diets - diets rich in seaweed, seafood and fish
- Thermalism - sea products heated
- Hydrotherapy - massaging the body with water jets



Thalasso treatments facilitate detoxification while nourishing the skin, relaxing the body and unwinding the mind. Seawater, seaweed and marine products facilitate uptake of minerals and vitamins for rejuvenation, preservation and curative benefits. Without proper nourishment, our hungry and thirsty cells won't have the energy to do their chores. If the body

lacks essential minerals, gut cells can't do their job and nutrition will not be fully absorbed from the digestive tract. As a result, body cells will not receive all their required nutrients no matter how well you eat. Thalasso therapy creates a system of detoxification and nutrification for optimal functioning of the human organism.

Thalasso theory suggests that mineralization must be the first step on the path to wellness, in any treatment program where long term results are desired. Once balance is achieved, the body gradually and proficiently begins to regulate its own system. After six weeks of dedicated Thalasso treatments, many common health concerns just naturally slip away. Thalasso treatments can move us away from current costly, invasive and toxic pharmaceutical solutions.

Thalasso therapy reminds us that the psychological benefits of water and its ability to reduce stress should never be underestimated.

Thalasso treatments are utilized for:

- Slimming/firming/toning
- Anti-inflammatory benefits
- Re-energizing

- Physical therapy
- Stress reduction/relaxation
- Moisturizing the epidermis
- Revitalizing youthful glow
- Diminishing wrinkles
- Reducing cellulite and fatty tissue

The study of the sea and algae ecology did not seem like a scientific priority for a hundred years. In the last few decades that has changed and suddenly we are curious about the medicinal facets of the sea to cure or alleviate current conditions.

Thalasso therapy treatments include, but are not limited to:

- Walking on the beach – at the shoreline and on the beached seaweed/algae/kelp for the upper respiratory system
- Eating a sea diet
- Seawater/salt/seaweed baths
- Exfoliation/scrubs/packs
- Poultices – pressotherapy
- Cold marine treatments for sensitive skin
- Hot marine treatments or algae full-body wraps to maximize absorption
- Red algae anti-wrinkle treatments
- Alginate body mask
- Salt packing

WHY THE SEA? RETURN TO THE BEGINNING



The sea delivers essential nutrients, minerals, trace elements, polysaccharides, Fucoi-dan, fucoxanthin, Modi-filan, amino acids, en-zymes and naturally-oc-curring botanical horm-ones during Thalasso therapy treatments.

Seaweed automatically chelates naturally-occurring minerals and elements in a compatible way so that they are available for the body to quickly assimilate. A Thalasso treatment improves vascular circulation and cellular metabolism by satisfying the body's nutritional needs and stabilizing endocrine function.

Sea minerals and marine nutrients are the building blocks of life and necessary elements for long term health management. When a proper “diet” penetrates cells of the dermal barrier, cellular mitochondria receive the necessary support to ensure cellular metabolism is stimulated. Mitochondria are cellular organelles that sit at the center of the cell and serve as power stations whose only job is to produce cellular energy. When a cell is powered up, metabolism (the housekeeping function responsible for cellular maintenance) is high and the system will run optimally. This amps up internal defenses that protect cells so they can tolerate environmental stressors and eradicate free radicals. Think of free radicals like walking time bombs. Free radicals don't get along with other biological molecules because they are not stable. Like unstable people, they can blow up at any time and in doing so, they have a tendency to take down healthy cells with them.

As we get older, the body loses DNA repair enzymes that protect us against sun damage that generates free radicals, causes collagen

deterioration and suppresses cell turnover. DNA repair, collagen production and cell turnover are activities that naturally slow down as we age and should be looked at no differently than the loss of muscle mass, joint flexibility and physical stamina. Activated growth factors and other cellular activators found in seaweeds can jumpstart cellular propagation from within the cells, increasing collagen production and resulting in toned, plump, glowing skin. Think of collagen like the muscles of your skin; the skin just looks better when collagen is “turned on.”

CHAPTER 2:
CALORIE RESTRICTION MIMICKING
WITH VITAMIN SEA



“Seaweed is the Superman of all super foods”

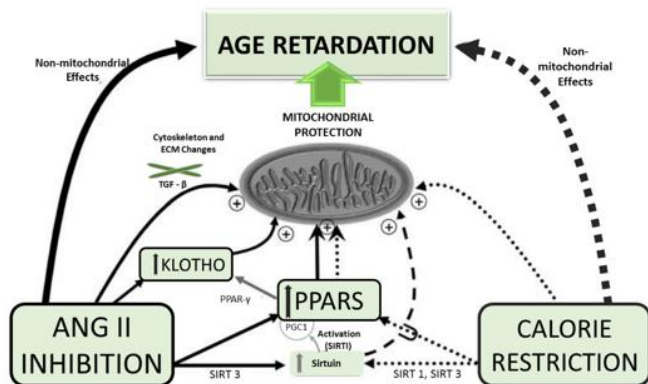
Daniel Marquez

TO EAT OR NOT TO EAT

Good health is all about balance in the body. Nourishment needs to go in, waste products need to go out. A whole-body, free-flowing waste removal system can be created by feeding the gut and skin a proper diet of essential nutrients and engaging in a water lifestyle. When we feed our body in this manner, we enter the field of calorie restriction mimicking (CRM). A well-studied nutritional method, CRM is the reduction of caloric intake by 25-65% while maintaining optimal levels of protein, vitamins and minerals. The nutrient supplementation needed for balanced CRM can be best attained by Thalasso therapy methods. CRM is a powerful healing tool and has been recognized by the scientific community as an opportunity to tap into biochemical pathways (Klotho/AMPK, mTOR, SIRT, Insulin/GF-1, Sirtuins) that are essential factors in a promising nutritional longevity theory.

Seaweed is the planet's most nutrient-rich, complete and available source of essential dietary elements with minimal caloric value that does

not requires the body to “work” for its fuel. Seaweed drops off its nutrients, chelates minerals and trace elements in a way that speaks best to the system, then it



picks up the trash and excretes it out of the body. Chelation therapy is when improper metals such as lead and nickel are grabbed and removed from the system, while essential minerals are “complexed” in a way that increases their bioavailability and capacity for systemic absorption. It is key that atomic metal ions are properly bonded with specially

coordinated charged molecules known as chelators. For example, iron is best absorbed when it is made available to the body through a chelator like glycine or a heme protein. Calcium needs potassium and magnesium to perform its functions correctly, otherwise calcium alone can be very toxic to the body. In general, mineral balance is extremely important for optimal health.

Seaweed contains natural chelators and a full spectrum of minerals in one package, and can function as one serious doctor that assesses your body's needs and then escorts minerals to their proper destinations. Seaweed can provide the body with essential nutrients and minerals without calories that require internal digestive activity for them to become available to the system. Seaweed, Thalasso therapy and thalasso baths offer natural CRM regimens in a non-stressful manner, creating an optimal life choice capable of pushing the boundaries of your longevity possibilities.

Thalasso therapy offers a holistic CRM lifestyle choice that is achievable, sustainable and natural. Thalasso therapy offers simple routines that slowly slip CRM into your life without hassle, inconvenience or dangerous medications. Seaweed and seawater provide nutrients that require little processing, without calories, making Thalasso therapy the best candidate for a CRM success story.

Calorie restriction mimicking is recognized as the most reproducible strategy for anti-aging and for extending human lifespan. Some professionals are going so far as to call it the closest we have come to the fountain of youth. CRM delays the onset of age-associated degenerative diseases by greatly impacting cellular longevity pathways that play evolutionary roles in apoptosis and tumor suppression. Apoptosis is a biological term for the process of organized, genetically-driven cell death. It is believed in the medical research community that CRM provides insight into the cellular mechanisms of aging and longevity modulation possibilities.

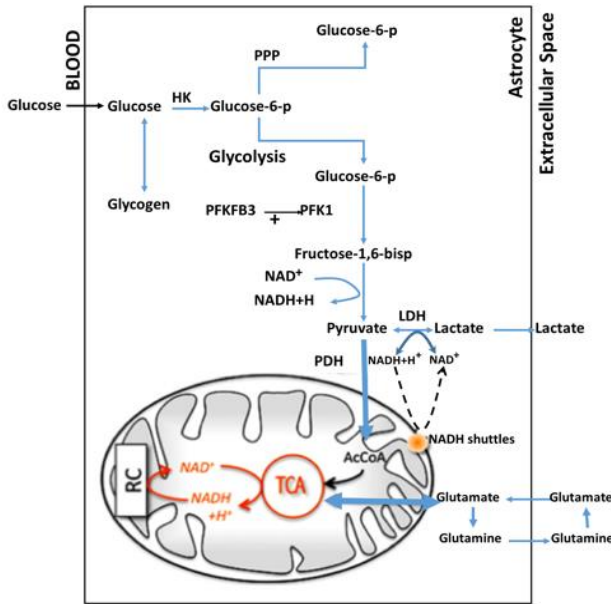
It has been scientifically verified that restricting calorie intake modulates the rate of aging. This is done by preventing the onset of cellular pathologies and biomolecular deterioration that are typically associated with the process of growing old. Age-associated disorders damage proteins and facilitate the breakdown of DNA, potentially bringing about detrimental changes in gene expression. CRM influences aging, metabolic rate and energy/nutrient usage through a nutrient sensing process that regulates ATP, AMP and genetic activity. The body's nutrient sensors are responsible for a cascade of events that stimulate cycles of cell propagation, DNA binding and balancing of intra/inter cellular insulin that affects blood sugar levels and metabolism.



CRM can manipulate the nutrient sensor to keep our energy pathways and nutrient blood levels in a natural state of homeostasis. It keeps the body in a state of high efficiency with respect to using nutrients for fuel and cellular maintenance, instead of repackaging nutrients for storage and latent energy.

CRM calls upon our bodies inherent survival instinct to *self-regulate* cell proliferation, internal DNA repair and protein synthesis, thus modulating cellular lifespan. CRM induces a routine of cellular self-maintenance and diverse cellular functions that enhance digestion of dysfunctional or unnecessary cellular components. CRM effectively reduces the accumulation of molecular damage resulting from age-inducing factors such as oxidative stress, which can tax the metabolic system and prevent cell proliferation. Cells are programmed through CRM to be in proliferation mode due to engagement of their fuel sensors that register the need to focus on surviving instead of dying.

Today's science is assembling team longevity. Klotho, AMPK, ATP, ATM, mTOR, SIRT, NAD+, Insulin/GF-1 and Sirtuins are revealing themselves as mechanisms that support, regulate, activate and protect



cellular longevity. There was a time when people had no clue about basic anatomy such as what an oblique is, how quads perform or what the purpose of the hamstrings are. Team longevity is comprised of anti-aging superstars that hold the keys to optimum

cellular detoxification, DNA repair, collagen production, cognition maintenance, mitochondrial functioning for cellular energy production and circadian sleep pattern equilibrium. I would surely guess that these anti-aging marvels will soon become common knowledge to those who wish be a part of the Longevity Revolution.

CRM Benefits

CRM longevity possibilities began as a scientific moment in 1997. Research continues to unravel this unique anti-aging strategy, but the discovered benefits so far are well documented and considered highly credible. *The concept of CRM is that by inducing mild stressors in bodily systems, it triggers protective responses that lead to strengthened defenses.* I would not be surprised if the use of thalasso therapy treatments in conjunction with moderate amounts of seaweed added to the diet eventually becomes a central component in disease reduction and longevity promotion.

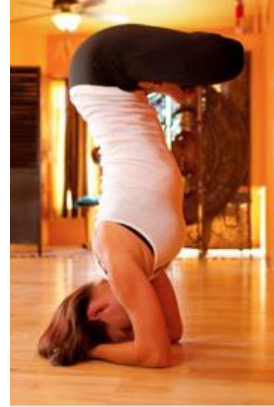
CRM benefits include, but are not limited to:

- Improved cardiovascular function
- Balanced blood sugar and nutrient levels
- Orderly cell death
- Improvement in repair and maintenance of DNA integrity
- Weight loss
- Increased muscle mass
- Improved brain function including cognition maintenance
- Improved nerve function
- Improved ability to engage in physical activity
- Stimulation of cell activators and growth factors for enhanced tissue vitality

MY OWN JOURNEY

IS CRM NEW?

Fasting has always been at the heart of nearly every spiritual tradition. Throughout history fasting has been used to detoxify the body and prepare the mind for spiritual journeys that lead to self-enlightenment. CRM is hardly a new theory; science is just now getting around to validating what our ancestors knew as the best way to health, happiness and personal understanding.



Food is the most dangerous of all drugs. The detrimental effects of a poor diet can take years or decades to fully expose themselves in pathologies that arise from mis-nourishment and dehydration. It can take years for an “eater” to develop heart disease, diabetes and obesity along with all the associated medical complications that disrupt life. It is no great secret that many health issues arise from the overabundant sources of empty calorie foods available for daily consumption.

IN MY OPINION THE GROCERY STORE IS BY FAR THE BIGGEST DRUG DEALER IN TOWN.

Calorie restriction was not something I intentionally set out to participate in. It happened as a byproduct of my entering into a thalasso lifestyle. When I moved to the beach, I was a true beginning Thalassophile. Long romantic strolls along the beach was where it all started for me. Soon I started feeling better and better. Before I knew it, seaweed and I were cuddling in the bath and making out in the kitchen.

As I dove deeper into a thalasso lifestyle, I noticed little incremental changes in my energy, sleep patterns, appetite, weight and skin.

Amazingly my daily blood sugar issues seemed to slip away. My weight somehow balanced itself and my recovery time after physical activity was better than it was when I was in my 20's. I honestly had no clue what was going on.

My experience led me to dive into this book and my research propelled me deep into a sea of information about nourishment, eating and sustainability. Saltwater and seaweed made me question everything I had been “fed” about food. One day I sat down to eat a meal and it hit me like a ton of bricks. We are conditioned to eat three meals a day and eating is nothing more than a habit. A really bad habit at that. It has been more than three years since I have eaten more than one meal a day, and I could not fathom going back to a three-meal-a-day regimen. The amount of money and time I have saved on food products and preparation can't even begin to be stated loudly enough.

I found that when I removed the copious amounts of food from my life my brain worked better, my focus was unbelievable and slowly the feeling of “age” just went away. My body didn't hurt, my cognition was vastly improved and my skin returned itself to a youthful suppleness.

Eating is the #1 social drug that continues to cripple human systems and jeopardize long term health by taking away any possibility of longevity. Food should be considered **THE** gateway drug that only leads to prescription medications and long term dependency on pharmaceuticals.

I swear by CRM for anti-aging results with an aim for longevity. To date, Thalasso therapy is the most promising natural choice for a manageable CRM lifestyle that does not include stress, hunger or other starvation and deprivation issues that accompany most calorie reduction programs. Vitamin Sea works for me as the essential element necessary to ensure my CRM and longevity success story. Thalasso therapy creates natural CRM rituals capable of decreasing healing span while increasing life span.

CHAPTER 3:

BATHOLOGY - HOME THALASSO THERAPY



“Woman is like a tea bag. You never know how strong she is until you put her in hot water..”

- Eleanor Roosevelt

BATHING BEAUTY

Historical architecture deems the town of Bath one of Britain's most



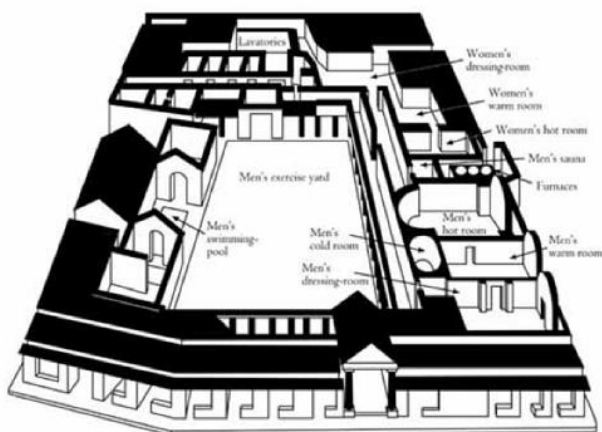
beautiful smaller cities that comes complete with a medicinal sea culture embedded in its antiquity. The city boasts over 500 buildings that are all considered to have historical significance. Bath was granted World Heritage Site status in 1987, of which

only a handful of such cities exist in the UK.

In 75 BC, the Romans developed Bath's largest hot spring as a destination location for rest and relaxation. For hundreds of years, soldiers would visit Bath after battle to heal their wounds and commune with one another. The massive Roman structure consists of a cool spring, a temple, a bath and a museum. The city of Bath was featured in the television show *The Seven Natural Wonders* in 2005.

The Roman era was a time when bathing was a community affair and bathhouses equated medical community centers and pharmacies of today. Baths were

visited multiple times a week and for some it was a daily ritual that was very time-consuming. The Romans believed that good health came from medicinal bathing, good food, therapeutic



massage and rigorous exercise. The bathhouse facilities supplied everything necessary for these activities to occur under one roof. The structure could have been considered the health mall complete with fine dining, bodywork, medical services and entertainment. Romans as a society were known for their hygienic lifestyle, good health and timeless beauty.

WHEN ASKED BY A FOREIGNER “WHY HE BATHED ONCE A DAY?”, A ROMAN EMPEROR WAS SAID TO HAVE REPLIED, “BECAUSE I DO NOT HAVE TIME TO BATHE TWICE A DAY.”

Today you can visit Bath and experience an ancient ritualistic destination like those of the past where healing was once so commonplace, none were worth a special mention. The waters of Bath carry a minimum of 43 confirmed minerals that percolate from 2,700 - 4,500 meters deep at a rate of 275,000 gallons a day. I would presume it is one of the most researched locations of all time.

After a visit to ancient Bath, you could rightly assume that you would never be the same again. Sitting in a space where the ancients carried out their self-preservation healing rituals would most definitely change the way you look at bathing forever.

Years ago, when I started my yoga practice, DVDs were just hitting the market. Before VHS and DVDs if you wanted to learn yoga, you had to show up to a class. Then along came mass marketing, the internet and wonderful home streaming yoga lessons. Suddenly you no longer needed to “go” to yoga. Many students started adding yoga rooms to their houses or simply giving up a den for a home practice space.

What if you never had to “go” to the spa and you could just walk down the hall for the most state-of-the-art, effective and affordable beauty treatments?

My love for baths began as a little girl. When I was young, my home was always busy and quiet time was not easy to find. For me the act of taking a bath was established early in my life as a time of peace, quiet and daydreams. I always loved how the water felt on my skin and the bath was my common “go to” when I was not feeling well, or sore after a long day of teaching yoga. A bath is one of my favorite places to stretch, float and be in the moment.

My personal bath routine includes tea, massage, masks and even meditation. I take bathing very seriously, and the older I get the more I fall in love with my bathing beauty rituals. I look forward to bath-time every day and I consider bathing my daily “walk” to sustain my beauty.

When seaweed entered my life, it elevated my bath to pure art. Fresh water and seaweed are perfect mates. Corrosion and decay don't have a chance when the bath is transformed into a home-crafted marine environment of fresh water and seaweed. Seaweed “turns on” my skin by helping it work and feel as it did when I was young.

Most homes come equipped with an amazing opportunity to create a domestic DIY health maintenance system, capable of turning your bathroom into a pharmersea. When used correctly a bath can become your best anti-aging and longevity promoter. Just as the kitchen is a key component to health and wellbeing, the bath is where beauty and youth go for their daily diet and self-maintenance.

When water is heated between 96-102 degrees, the minerals in seaweed and seawater dissolve and become bioavailable to our body. Bioavailable simply means the water delivers nutrients to your cells, just like a waiter brings you your meal at a restaurant. When the waitress sets a plate of food in front of you, the food is there and ready to eat. The plate is the delivery mechanism that makes the meal bioavailable to your mouth.

**WHEN UTILIZED AS A CARRIER OF ESSENTIAL
NUTRIENTS, WATER CAN TURN SKIN INTO THE NEW
LITTLE BLACK DRESS.**

Minerals want to neutralize their charge when they dissolve, and are looking to “hook” up. Warm, wet, negatively-charged skin in a bathtub is perfectly prepared for mineral penetration and nutrient absorption. All that is necessary for a little skin fitness is 15 - 20 minutes of immersion in warm/hot seawater or seaweed for the cells and minerals to get engaged. Ideally you want to extend your



bathing time just as you would your workout time: the longer, the better. Baths naturally make everything look, feel and work so much better. Mindful bathing can give rise to self-sufficient domestic healthcare opportunities that put beauty and longevity possibilities into your own hands. Without realizing it, everyday bathing rituals can invoke ancient traditions that invite beauty into the healing model. When preparing for a bath always make sure you have everything you need before you slip into the tub.

For a complete bath ritual, you will need:

- A bathtub
- Bath salts and/or seaweed (dried or fresh)
- Large glass of cool water
- 2-3 washcloths in a bowl with ice water or 2 frozen neck gel packs
- Cup of bancha/kombu/nori green tea - see recipe
- Towel
- Robe
- Quiet
- Time
- Space heater or a sunny window

Luxurious spa treatments can easily be replicated at home. Thalasso therapy can help you promote a healthy aging process through conscientious beauty rituals. Most of us already have a bathtub in our homes just begging to be used properly. Thalasso therapy suggests that every day you take the time to get your bath ON.

We can bathe to clean or we can bathe to heal, the choice is yours. If you want to bring the sea home, you will need a combination of education on these topics: thalasso therapy techniques, thalasso products, foraging techniques or where to purchase products, and adoption of dedicated bathing time in a home-crafted marine environment.

THE SMELL?

Everyone reacts differently to the smell. I personally never notice it anymore. The major benefits received from seaweed are typically enough to help anyone get over any odor that might slip out of the tub. Just like broccoli,

asparagus or papaya, it's a smell you get used to. My son thinks papaya smells like throw-up and most of the time I have to agree, but I love how it taste and how good it is for me



that I quickly got over the funky smell. Fresh seaweed smells natural and you will get used to it in no time. If you are interested in longevity and anti-aging, I would suggest you cut seaweed a little slack and give it an opportunity to show you just how much your body craves it.

WATER TEMPERATURE

There was a time when we would “tap” the potential of water by modifying its temperature. This concept is still used today as a Physical Therapy and sports rehabilitative tool.

COLD WATER

The effects of cold water on the body are complex. Cold water is a potent stimulator as well as a direct sedative or tranquilizer. Cold water changes the core temperature of the body and wakes up an internal thermal reactor. When used properly, cold water becomes a powerful stimulant for all bodily functions and water then transforms into a healing tonic.

Cold water was once considered a vintage cure for headaches, depression, intoxication and other emotional/mental instabilities. This therapy could be compared to how a cook wakes up yeast with cold water. A quick plunge can “snap you out of it” and is considered immensely invigorating. Cold water is a psychological restorative that awakens essential nervous activities without taxing the system and bombarding the body with chemical stimulants like caffeine or nicotine.

A quick, early morning plunge in the sea can be immensely invigorating. When the body touches cold water, its processes initially slow the system, followed by a great deal of activity. If the body is immersed in cold water too long, uncomfortable bodily responses emerge.



Cold water baths are not intended for more than a short dip not to exceed 7 minutes. Cold baths are considered dangerous for the elderly and for the very young.

HOT WATER

A HOT BATH A DAY KEEPS ILLNESS AWAY

Bathing in waters above body temperature is considered hot bathing or Thermalism. Hot water is a stimulant that can be seen through vasodilation of the skin, breathe elevation and increased heart rate. Hot water is the most powerful of all excitants.

When water temperature exceeds 102 degrees, make sure there is someone in the home who can check on you every 10 minutes as a precautionary measure. Regardless of temperature, be sure someone is always aware that you are in the bath.

Hot water relieves congestion, prevents blood from clotting, relaxes muscles, loosens mucus membranes and helps internal fluids move freely. Increasing the temperature of the body helps kill bacteria and viruses that can lead to illness.

Initially hot water creates excitement and then as the body gets comfortable with the temperature, it becomes exhaustive. Hot water combined with marine products balances the endocrine system and the autonomic nervous system. To ensure a good night's sleep, after your bath let yourself air dry to the point of getting chilly. The cold air raises internal melatonin levels, ensuring a sound night's sleep. Hot baths are considered dangerous for the elderly and for the very young.

Bathing is the ideal way to deliver thalasso ingredients and to engage in home Thalasso therapy. Daily bathing is a central component in becoming a home thalasso therapist. When preparing for your home thalasso treatments, set aside a minimum of 45 minutes for your therapy. Be sure to account for prep time.

Start with the tub only half full of water. This will allow you to add more hot or cold water as your body adjusts to the temperature. Always be very

careful when entering a bath with seaweed, it makes for a slippery entrance and exit from the tub and extra care should always be taken.

Your bath will be most effective if you stay immersed as long as possible. A cold or frozen neck ice pack can be hung on the bathtub water spout to rest your feet on if you get too hot. Ice on the bottom of the feet makes for a terrific hot bath equalizer. An iced washcloth can be draped over the top of the head or the forehead and eyes. This will help calm inflammation, reduce puffiness and diminish stress. Drink plenty of cold water during your bath to encourage fluids in and fluids out. A second neck pack makes for an ideal headrest that will help you stay comfortable so you can enjoy your hot treatments longer. The water should stay hot enough so you sweat at least half of the time. Get out any time you need to urinate. The goal is to encourage a free-flowing detoxification/ mineralization system for 15 - 30 minutes. Urination should not be suppressed in order to keep from getting out of the tub. If you have to go, be sure to get out.

During your bath, you can engage in active relaxation activities to help pass the time. Water offers a nurturing “touch” over the entire body. This helps us to feel supported and embraced, and it creates the perfect ambiance to engage in meditation or gentle stretching. Be sure to turn yourself in the bath to take advantage of the support of the tub; a yoga cobra can easily be done with the support of the tub. Many years ago, I taught myself all my yoga arm balances in a very large bathtub surrounded by the insulation and safety of the water.



When bathing in seaweed, always be sure to massage it into the skin under the water to help facilitate absorption. Think of a bath like a meal. Most meals should be savored slowly and enjoyed, but sometimes you just want to throw the food down your mouth and eat until you cannot take one more bite. Massaging yourself in a bath is like throwing

nutrients down those little cells' throats. But rather than getting full, they just rejuvenate vigorously.

You can develop your own underwater massage sculpting technique for your legs, belly, waist, breasts, butt, face and yes ladies, even the



hoo-hoo. Intimate beauty routines can be a regular practice during your bathing rituals. Breast health can be protected, vaginal circulation can increase and, if you are so inclined, just maybe an intimate life can last a little longer. Vaginal boot camp can move you beyond Mr. Kegel during bath time to provide a simple, pre-

ventative measure for vaginal atrophy, which is essentially thinning of the vaginal walls and deterioration of their elasticity. A complete longevity routine should also include the maintenance of intimate beauty and erotic ability. For women over 50, sex lives can be saved when personal massage is seen as a necessary aspect of overall health and wellness.

Bath time provides the perfect environment to apply algae or salt treatments to areas such as the: face, neck, hands and décolleté. Most seaweeds make a wonderful washcloth you can rub on the body in the warm water. It will share its oligosaccharides and polysaccharides to aid in the skin's immune response and boost antiviral and microbial protection mechanisms in addition to infusing skin with extra conditioning elements. Some seaweed “washcloths” go beyond cleansing and actually wipe away the visible signs of aging.

When you are ready to exit the tub, stand in the bath and whisk off the water and massage the skin until it is dry. The towel should only be used for the hair. Slip a robe on and ideally you should sit in front of a

sunny window. The best-case scenario would be to sit outside in nature, relax, meditate and bathe “in” the moment while drinking seaweed green tea.

Baths should become a daily ritual that your mind and your body look forward to. When you fall in love with baths, decompressing and letting go becomes a regular part of your daily routine. Bathing serves as a time to let go and enjoy a gentle exfoliation of the things that make life rough to handle. Bathing is an essential thalasso tool that can be used daily to maintain the exterior, unwind the mind and keep beauty turned on.

A bath can take us back in time to when ancient folk healing practices were considered the gospel and many looked to the ocean for mental salvation and physical resurrection. In a bath, you will discover that “holy” water can return you to a place where youth is a given and



age need not come as a burden. Wouldn't it be amazing if we could look to the horizon of our life with excitement and anticipation rather than fear and trepidation?

REPURPOSING BATH WATER

A common roadblock that I stumble up against when convincing someone to bring Thalasso therapy into their life is the use of water. In California, we always seem to be in a drought and the idea of using water for bathing turns a lot of people off. The fact of the matter is; it only takes six to eight minutes to fill a bathtub. Most showers last at least 15 minutes and all the water goes right down the drain. You can fill a bathtub up in half the time it takes to shower, and the water will still be there for you to enjoy after the water is shut off. Water from seaweed/salt baths can be repurposed for a multitude of uses. After I am done with my bath I do not empty my tub right away.

When you adopt the practice of air drying after a bath, you will save water and money on washing towels to compensate for most of the water used during a bath.

I leave the water in the tub for the day to be use for:

- Watering houseplants and outdoor plants - algae makes a fantastic fertilizer and your plants will thrive. Note: Salt baths should not be repurposed for watering plants.
- Properly rinsing out recycled cans, bottles and other recyclable consumer goods.
- Pet baths - seaweed/salt are just as good for animals as they are for you. Skin care, hair care and flea management can be a bath away to make your pet's life better. Even your pet deserves seaweed goodness in their lives to avoid pesticides, detox from processed foods and to relieve joint stiffness and pain naturally. The best thing to assure longevity for your pets is regular sea swimming or seaweed bathing.



- Floor care - seaweed/salt provides great non-toxic floor care options. You can fill a bucket with bathwater and squeeze in a fresh lemon, crushed eucalyptus leaves, or fresh lavender stocks for extra cleaning power and a natural fresh scent. If you have small children/pets you will love the results without a toxic smell or hidden dangerous chemicals, all while saving a ton of money.

I keep a bucket by my bathtub so I can utilize my bath water throughout the day without spoiling the water. I live in California therefore the concept of reusing water is normal for me. If this is a new concept that makes you squeamish, then consider taking a very quick shower before you bathe. Keep in mind that bathology moves beyond getting clean and into the landscape of healing. You should enter the bathtub fairly clean if you plan to repurpose the water.

Seaweed and/or salt allow me to skip shampoos, conditioners, soap and other products that would otherwise move harmful toxins through my dermal barrier and into my system. Adding thalasso bathing to your life and repurposing the water can actually save water in the long run. Reusing the seaweed/salt water gives you the opportunity to experience endless possibilities of salt and seaweed use in the home. You might just find that you bring less and less harmful personal care and household products into your home when you take thalasso routines beyond the tub and into your life. You can come to see your bath water as a useful whole home resource. Sea, salt and seaweed can save you money, remove toxins from your entire home and protect your pets/children. Don't let all the good stuff go down the drain.



At the beginning of your thalasso journey you will want to treat bathing like boot camp. Eight to thirty days of thalasso therapy treatments are recommended. Consider it a starting point to facilitate detoxification and mineralization, and to prepare the body for all other thalasso home

treatments. Start with seaweed bathing and rotate salt bathing in every third day. A bath should last 20 - 40 minutes, with an hour being pure decadent indulgence that should take place once or twice a month. If you live by the ocean, you will want to do your hour bathing rituals in natural surroundings if possible.

Compare bathing to running. A short run on a treadmill is fun but after a while it's pretty boring, and it's best to go outside and run in nature where you can interact with your surroundings. Swimming in the ocean gives you room to move, enjoy the buoyancy and to participate in the water.

After your initial boot camp, you will settle into a routine that best suits your skin and your schedule. Once a day is always recommended, but you will still receive great benefits with two to three times per week. I personally can no longer take a bath in "naked" water. Once you experience "living" water, you will find it hard to go back to regular bathing. You will soon find yourself asking seaweed, "Where have you been my entire life?"

CHAPTER 4:
ALGOLOGY
SIMPLE SEA-LUTIONS



“Though the problems of the world become increasingly complex, the solutions remain embarrassingly simple.”

Bill Mollison

GOT KELP?

Two-thirds of our planet is covered in sea vegetation and ocean flora that produce the largest percentage of the earth's living resources. Yet seaweed/algae/kelp are still an under-developed natural resource that is virtually unknown in western cultures. Sea ingredients are misunderstood and an underutilized resource.

Seaweed/ algae/kelp are:

- Plants
- Produce
- Flowers
- Succulants
- Trees
- Meadows/fields
- Forests
- Desserts
- Waterscapes



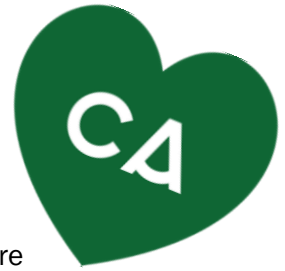
Seaweeds have recently emerged via science as the ultimate superman of all superfoods. The World Health Organization recently deemed spirulina and chlorella (freshwater algae) a possible cure to world hunger and malnutrition.

Seaweed/algae/kelp offer a wide range of therapeutic possibilities both internally and externally. Botanical seaweeds are classified as: green, brown or red. Think of the categories much like: fruits, vegetables and herbs. Seaweed is a super healer packed with mega nutrition and rejuvenating qualities. Adding a moderate amount of seaweed to your diet and your beauty routine, will immediately relief you from many physical ailments and chronic conditions that occur due to poor lifestyle habits. Seaweed provides the best dietary source of nutrients, and no land plant can even remotely match it as a source of metabolically required minerals.

As a child of the desert, I never contemplated the ocean. Before I was 21, a low tide, the concept of foraging and sea gardening never occurred

to me. When I initially saw the ocean, I was almost 21 and visiting California for the first time as an adult. My eyes couldn't even begin to take it all in. I knew then and there that I had found a place to settle and call my own. California would become a love of my life and to this day it is still my home. I then spent 20 years looking for a way to take myself and my life to sea. In 2012 I moved to Santa Barbara and now my daily routine includes sea shore strolling and ocean floating. Me by the sea is about as happy as I could be. Little did I know that one day I would garden, harvest and wild forage on my own ocean plot, but that adventure will come later.

I loved the treasures that I found on the shores, and I slowly but surely built a wondrous collection of seashells, rocks, sand dollars and sea glass. Then one day I ordered a bottle of seaweed body gel only to discover that my world would never be the same again. At first I hated that gel: it was sticky and the fake smell did nothing for me. However, there was something hidden in there that was magnificent, My skin loved it. I hit the books to uncover this mysterious element. One use of this product tightened my skin, evened my skin tone, returned my glow, and just made me feel refreshed, rejuvenated and re-energized. After a few uses I started to see the years slip away. I suddenly didn't need those costly Medi-spa visits, and Botox was soon a distant memory. In the beginning, I had quite a few "what the hell" moments! My mind was blown as I started to realize that maybe anti-aging was feasible and longevity might be a real possibility.



There was no way I was letting this discovery slip by me. Seaweed and I would soon be on the road to becoming best friends forever. Then there was that fateful day I took my beach walk. I reached down to pick up a shell, and I recognized a piece of seaweed as one I had seen in my books and online during my research.

Suddenly seaweed was all I could see. Holy cow, it was always there, and I never noticed. I picked up a few different pieces, put them in my bag and took them home to experiment. The mad scientist in me came

out in the kitchen, and suddenly my home was transformed into a seaside thalasso chemistry lab.

Seaweed foraging, seaweed reproductive identification, low tide walks and the formulation of sea products would become my new passion. Once I found the treasures on the beach, I stopped noticing the shells and pretty rocks altogether. I was as drunk as a sailor over seaweed.

Gardening has always been a passion of mine. When my eyes saw the ocean's intertidal zones: an amazing, natural and perfectly organized garden revealed itself to me. The sea became my favorite picking grounds. At the ocean's edge and in her tidal zones I can find fresh beauty ingredients, gather food and hand pick luxurious bath products capable of putting any high-end spa to shame.

During low tide, the ocean pulls back her waters to reveal a bounty of sea goodness growing on the rocks and floating in the tiny pools. It is a cornucopia of sea goodies. The edge of the sea is one of the planet's richest habitats of plant growth and organism proliferation. Intertidal zones are a key contributing factor to natural habitats that create phytoplankton breeding grounds and eventually nourish the bottom of the food chain, and everything we eat one way or another.

EXTREMOPHILES

SEAWEED MANTRA: NO PAIN, NO GAIN

Seaweed is one serious heavy hitter that brings massive survival abilities with it. Unarguably seaweed grows in some of the planet's harshest conditions, and it spends most of its life trying to save its own little green, brown, or red butts. Seaweed has survival designed into its DNA, and when the going gets tough, its defense mechanisms ramp up its internal army for some serious natural protection.

Due to its poor living conditions, seaweed is naturally equipped with organic positive virtues that include:

- Anti-viral
- Anti-fungal
- Anti-thrombotic
- Anti-coagulant
- Anti-obesity
- Anti-cancer
- Anti-radiation
- Anti-inflammatory

It turns out that plants have always thrived on stress, and most plants are extremophiles to some degree. When things get hard, plants can't pick up their roots and take a hike. Plants have to figure out biochem-

ically how to take care of themselves and their offspring, right where they are regardless of how much water, food or toxins are delivered to them.



Plants are the original calorie restriction-mimicking superstars. Science has proven that plants have more medicinal and anti-oxidative properties when they are stressed and live a hard life, compared to the farmed and coddled veggies/fruits found in supermarkets.

Don't most of us strive and thrive under pressure, and rise to the occasion when life gets rough to handle? Extremophiles demonstrate that adversity serves both plants and people well, and seaweed is the epitome of the ultimate survivor.

Seaweed stress-induced superpowers float in a gel of polysaccharides and oligosaccharides that have their own beneficial properties. Seaweed gels are chock full of vitamins, minerals, trace elements, proteins, enzymes, amino acids and naturally occurring plant hormones at a level that no land plant can match. About thirty-six percent of seaweed's dry weight accounts for the minerals it accumulates while spending its life floating in seawater.

For decades, the medical community has used the properties of seaweed gels for wound care, making cellular growth mediums and promoting cell activation. Alginate and carrageenan can be found in every hospital in America in the form of drug delivery gels, and they are also widely used in bandages. Agar was first used as a growth medium for stem cell research in 1997, and as a result stem cell research went through the roof. Polysaccharides have been used for tissue engineering and organ transplants since the 80's as they help reconstruct the dermal matrix, assist in speedy recovery and decrease tissue rejection. For me it was a no brainer! Forget the petri dishes, I wanted this stuff directly on my skin's own stem cells.

The nutrient-rich environment of a thalasso bathing treatment satisfies malnourished and dehydrated cells nearly immediately. Miraculous



results can be seen within an hour after a 20 – 40-minute treatment. Imagine you have not eaten in 24 hours. In most cases, you will be starving, grumpy, your blood sugar will fluctuate, you will not feel well. Your energy will be zapped and your endocrine system will swing your moods all over the place. As soon as you eat a meal you immediately feel better. Within an hour, you will forget just how hungry you were not so long ago. A seaweed bath feeds the skin in the exact same way.

Skin benefits of seaweed baths include:

- Tighten and tone
- Hydrate and moisturize
- Nourish the skin
- Anti-aging and anti-cellulite properties
- Cleanse and detoxify
- Stimulate new cells and turn over damaged cells
- Return suppleness and elasticity
- Anti-inflammatory and muscle relaxant
- Ease dermal conditions

Marine environments are rich in dissolved minerals and nutritious aerosols that infuse into the lungs and mucus membranes. Nutrient absorption and tissue revitalization raises serotonin levels and leaves you with a tranquilizing effect. Serotonin helps us fight depression, stress and strains. A seaweed bath that includes sweat and steam is a great way to balance emotions, stabilize mental activity and serotonin levels. A 30 - 45-minute bath can be as beneficial for your mood, body and wellbeing as any strenuous workout.

When cells are exposed to sea nutrients in a warm bath, your pores dilate. You could say they open their mouths as wide as they can in order to eat the biggest meal possible. This creates a sieve, or vacuum effect, that accelerates osmosis and the body literally pumps in the nutrients

UNIVERSAL MEDICINE – IODINE

By far the greatest gift seaweed bestows upon the human body during thalasso treatments is the essential element known as iodine. It is estimated that 40% of the population is at risk for iodine deficiency and this continues to be a global health concern. Iodine is important for



alertness, brain health and thyroid function, as well as sweat gland activity that aids in osmotic balance, lymph drainage and cellular detoxification. Long term low iodine levels can lead to upper body congestion, dry skin (neck, chest, face, arms) and breast concerns for women. Breast concerns may include cysts and poor lymph drainage, and deficient iodine levels may eventually lead to breast cancer.

The body does not make iodine; therefore, it must be added as an essential part of your diet or beauty ritual. Iodine is assimilated best through the skin. A beauty ritual that includes regular seaweed baths is the best way to ensure you receive your essential daily dose of iodine. Seaweed can protect feminine systems by offering a verifiable natural breast cancer preventative. Four weeks of regular thalasso bath treatments can reverse the symptoms resulting from chronic low iodine levels in the body.

Seaweed baths can quickly become your favorite youth protection weapon that has always been available to you, right in your own home. Thalasso therapy will show you how marine products can save “beauty” simply by throwing a little kelp her way. All this time so many have searched for the fountain of youth, and it was there all along. We were all looking too hard for a radical solution when it is actually quit simple.

If I have my way, Thalasso therapy and bathing rituals will soon be your very favorite beauty workout routines and breast cancer preventatives.

CHAPTER 5:

FORAGING



“The voice of the sea speaks to the soul. The touch of the sea is sensuous, enfolding the body in its soft, close embrace.”

Kate Chopin

KELPING

AMA DIVERS – AMA-ZING GRACE



Once upon a time a group of women came along and conjured up a 1000-year scheme to sustain the bounty of the world. A promise was made to watch from below and preserve those above. The Ama Divers were empowered women who

took great pride in their lives, work and community.

Art and poetry depict Ama as early as 750 BC in Japan, Korea and China. Ama translates to “Women of the Sea.”

Today Osatsu, Japan is home to the highest population of modern Ama Divers. Japan has erected a cultural museum in their honor that many flock to from all over the world. The museum follows the history of the Ama divers, and educates visitors on the rich historical importance of these national treasures. The life of the Ama was busy and harsh. The exhibits give glimpses of the daily life of the sea goddesses. Ishigami-San, the statue of “the Honorable Stone Goddess”, is said to represent the soul of the Ama. It is believed that the statue grants one wish to each female visitor. The statue is like a phallic symbol of the female spirit and its role in maintaining planetary healing and the evolution of earth’s people. Ishigami-San represents the gentle strength the Ama possessed.

Ama divers spent most of their life at sea. Their profession allowed the women to live independently and foster strong communal bonds. For the Ama, diving was considered an art that took a lifetime of practice to perfect. The Ama were known to dive well into their 90s, and the older

Ama-san were greatly respected and considered treasures of the community. The Ama lived in a matriarchal society.

The Ama benefited from pregnancy and childbirth as these add deep blubber to the female body that cannot be duplicated any other way. The extra blubber protected internal female organs from the negative effects of cold water during extended dives. The Ama were truly free divers. For hundreds of years diving equipment was strictly prohibited in the ocean, to maintain the balance of the natural ecosystem. Ama divers dove with only a loin cloth to prevent garments from snagging on rocks and corals. The Ama were comfortable nude, and were often seen in groups huddled around a fire pit warming themselves in preparation for the dive to come. Many would spend up to four hours a day in the ocean water. As they would rise to the surface their “sea whistle” could be heard for miles, and mesmerized many sailors and explorers throughout history. The “sea whistle” was a technique to bring balance to their bodies’ internal system by neutralizing lactic acid and stabilizing blood plasma. The Ama naturally understood the power of breath control and bodily functions.

The gifts of childbirth allowed these women to dive up to 30 meters for two to three minutes in one dive. The pain experienced during childbirth, intense breathing, deep added blubber, and extended length of the birthing process prepares a female human to dive and care for her family after childbirth.

Maybe the penguin isn’t such a stranger to the human after all.

Foraging or wildcrafting can help offset the damage done by machine harvesting that has created ecological damage, erased ancient knowledge and overturned sustainable techniques. Many such as myself are turning to the past looking for a road map to move into a sustainable future for our oceans.



We all recognize the “beach” as a timeless wonder and a luxurious indulgence. The ocean, sea and beach have always been destination

locations for tourists worldwide. Those who live at the beach are envied. Nearly everyone who visits makes the statement, “we should come here more often,” or “I wish I lived here.”

I personally spent over ten years trying to find a way to move both my life and my livelihood so “ocean” was accessible to me on a daily basis. Finding my way to the water's edge was my total fixation, and my guess is that I am not the only one with a fetish for the sea.

Foraging brings you up close and personal to a world of wet wonders and mysterious sea-crests. During low tide the ocean invites you into her home to reveal many of her won-



derful delights. Each month the sea and the moon perform a magical dance that pulls up the ocean's skirt to expose its intertidal zones. The weeks surrounding a new moon/full moon are when the tides are their lowest. When the tide pulls back, the ocean reveals gardens of red, brown, green and blue as the seaweed/kelp/algae become fully exposed.

Tides are the rise and fall of sea levels resulting from the combined gravitational forces of the Moon, Sun and the rotation of the Earth. Each beach has its own tide patterns as depicted with a tide table; a low tide is closer to 1.00/.00, with a -.00/-1.00 being very low. Where I live, a high tide would be in the 3.00/5.00 range with a 6 being very high. This is important to know before you walk on the beach. The tide will tell you how far the water will rise on the sand. During high tide, it is best to walk on a pier to marvel at the waves and catch the atmosphere directly above the water.

The Irish are historically known for helping their way through their country's many hunger famines that were brought on due to war and natural environmental hardships. In Ireland during low tide, many of its

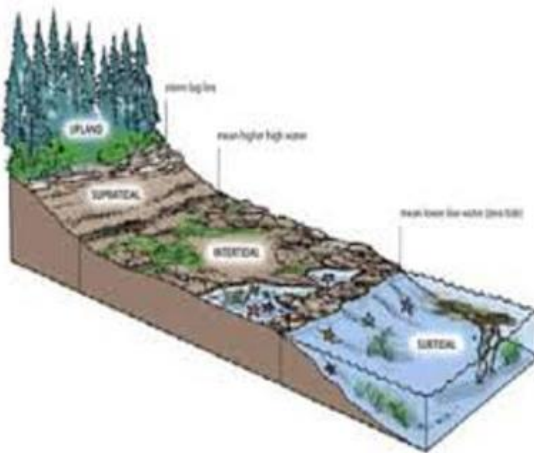


citizens can be seen in the intertidal zones with their buckets and scissors doing their monthly “grocery” gathering. In their culture, seaweed has been used for everything from Irish moss milk to promote healthy fetal development during pregnancy, to livestock feed that facilitates healthier animals, better food, and even the animal excrement would be used to nourish and mineralize the soil. Until the 19th century, seaweed mattresses could still be found throughout Europe. Seaweed mattresses provided great long term comfort, protection from overnight pests, as well as prevention of illnesses that could lead to deadly disease.

Foraging moves you from a beach goer to a beach participator. Foraging should be considered an active part of being a homespun thalasso therapist. When you get up close and personal with the sea, its vegetation and the ocean animals who live in the intertidal zones, suddenly seaweed doesn't seem intimidating, scary or gross. When the tide pulls back you have an opportunity to touch, feel and engage with seaweed in its natural growing environment. Most beach goers are only accustomed to seeing seaweed that is beached, in the process of dying, and extremely smelly. Fresh seaweed has a wonderful scent and is not at all stinky. Foraging gives you an opportunity to peek into the homes of seaweed/kelp/algae in order to see how their gardens grow, how they live their lives and who they hang out with. Algae comes in many varieties, species and classifications, not much different than fruits, vegetables and herbs. Just like identifying any other plant, with time you will begin to recognize the different types of sea plants available to you in the intertidal zones.

Imagine every day you went for a walk in a field of food, medicine and beauty supplies, and never once stopped to pick them up or take them home. Imagine doing this all because you were conditioned to believe products must be “bought” at a store in order for them to be safe, usable and beneficial.

I personally believe that every morning the ocean throws us our daily requirement of food, medicine and beauty products on the shore. Perfectly accessible to us all. But our eyes and our noses are conditioned to see stinky, rotting seaweed that most would rather avoid like the plague than take home to their kitchens. With time, research, practice and curiosity, you can learn to identify, clean, store and use the seaweed you find in the intertidal zones of your favorite beach. Dried seaweed is easy to store, stockpile and re-hydrate to incorporate in food, use as medicine and add to a beauty routine. It is simple to always have plenty of sea goodies at your disposal year round.



Once you have your seaweed “eyes”, a walk on the beach will never be the same. You will find that your eyes catch the different seaweeds rather than the rocks and shells that people spend hours collecting.

A walk on the beach will reveal what is growing in the water. Think of the seaweeds on the shore much like the apples that fall from trees in an orchard. It quickly becomes easy to identify the good apples from the bad, and seaweed is no different. Eventually you will be able to identify where the seaweed is growing in the ocean based on what is beached on the shore. Once you’re a forager, you will find yourself running to the piles of

seaweeds that wash up on shore as if they were treasures. All you need to become a kelping pro is time, practice and a little education.

Foraging should be done early in the morning right after the sun rises. Just all plant:, algae/seaweed/kelp have a life of their own that includes a reproductive cycle and a picking season. In general, most seaweeds are at the height of their harvest season June – October and should be considered summer crops. This is not true for all varieties. I am a California kelper, and I can only share with you my personal experiences. I have specific seaweeds that I forage for at different times of the year. I enjoy watching the reproductive and growing cycles of my favorite seaweeds. I love looking after the seaweed babies and I enjoy checking on them as they mature. Late Spring through late Fall is when I do most of my kelping.

Seaweed is safe to touch, safe to eat and safe to bathe in. As you become acquainted with seaweeds, they will intimidate you less and less. The internet is chock full of great seaweed: traditional and historical uses, as well as modern scientific research to back up all the claims that most seaweed product companies are **not allowed** to voice.

Seaweed is perhaps the **number one** most mislabeled product on the market due to all its wonderful properties that are not allowed to be stated on labels. Recently the state of California has put seaweed on a list of known cancer-causing agents. Seaweed has gotten a bad rap for hundreds of years, and it doesn't seem like it will end on its own without self-education by consumers. Becoming an experienced kelper can help you move past the conditioning and unjustified fear of all things slimy. Foraging can make you an ocean steward and a seaweed advocate. I personally love being a seaweed groupie.

LET'S GO KELPING

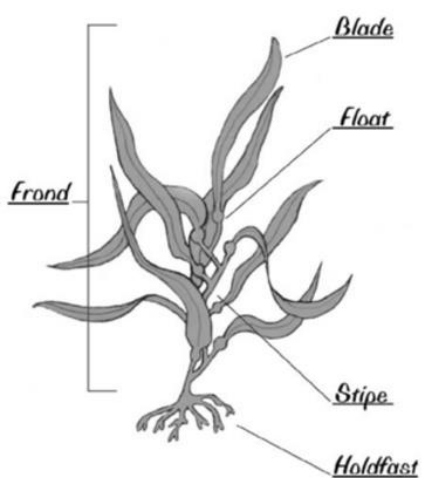
For a kelping excursion, you will need:

- To check the tide chart
- A bucket that is easy to carry, and not too big. Wet seaweed can get very heavy.
- Water boots or waders. Yes ladies, it is a very sexy get-up.
- Hat
- Scissors
- Lots of un-rushed time
- A spirit of adventure

Foraging is by far one of my favorite activities to engage in. Every month I keep my eye on the tide chart. I plan my foraging days as if I were going to Disneyland. I squeal over the minus tide days, every single month without fail. At very low tide is when you will find your biggest catch of seaweed booty. Foraging is a great way to get your hands in the water, and your mind at peace with nature. When we participate in natural activities such as foraging, it gives us an opportunity for hands-on ecological understanding and instills a spirit of ocean stewardship. Foraging makes you fall in love with the ocean on a whole new level. It Won't take long for seaweed to become your best friend.....Forever.

On foraging day, you will want to get up and out very early in order to get the best selection. Once you are dressed and ready to head out, that is when the fun begins. Take time to find your favorite location/s for kelping. The best months for tidal exploration are April - October. Before you start "picking" anything, take the time to be observant and aware of your surroundings. You will be surrounded by wet, slippery rocks, and the water will slush in and out. Watch the water patterns and proceed accordingly. If you want to stay somewhat dry, you must keep your wits about you, and proceed with caution and awareness. Falling and slipping on the rocks can be dangerous. If you are not careful, you can put your life in jeopardy. I have personally slipped many times and even

dislocated a finger. In all seriousness, be careful when foraging in the water. For some the shore is the best place to start. Foraging with a buddy is highly recommended.



When collecting seaweed, you want to protect the life of the plant and never pull it off the rocks or out of sand beds. Always leave the plants holdfast in place in order for the seaweed to continue its reproductive cycle. It is not necessary to spoil the whole plant. We are only pruning the sea plant in a way to help it thrive. This will assure your favorite gathering area is always thriving with “pick-able” seaweed. If you remove or disrupt

the holdfast, the plant will be done for the season and a new one will have to replace it the following year. Think of picking seaweed as no different than picking roses. You would never uproot the rose bush just for one pretty flower.

Scissors or a knife should be used to remove the adult leaves, the rest of the plant should not be disturbed. Fill your bucket with seawater and place the seaweed in it while you continue your keeping. After you have determined you have picked enough, be sure to rinse the seaweed well in fresh seawater several times before taking it home.

Leave all the little ocean creatures that live on the seaweed at the beach where they belong. When using seaweed, a little goes a long way; never take more than you need, or will use. Any unused seaweed can be placed in the garden as fertilizer; plants love seaweed as much as we do. There is no need for seaweed to ever go to waste.

Seaweed gathered off the sand will require extra cleaning. Reds have a tendency to “bleed” sand and are difficult to clean. Most reds should be gathered while the plant is still floating in water. This will reduce sand residue inside the plant.



You can look for an area where seaweed is floating in the water and up on shore. In this type of scenario, you will only gather seaweed that is already detached from the plant, and you will never disturb its life cycle.

Think of it like picking up fallen leaves from trees. This is the safest and most sustainable way to gather seaweeds. Always take extra time in the ocean hand-washing beached seaweed or any seaweed that has touched sand. This will keep your water inputs low once you take it home. It is best to keep as much ocean water on the vegetables as possible. Fresh water washes off a lot of the good stuff.

Nori, bull kelp, giant kelp, sea lettuce, agar, laver, dulse, kombu and wakame are just a few examples of the different kinds of common sea plants that can be found at most California beaches. For a list of seaweed, pictures and usage, please visit my website. In California you are allowed to harvest up to 17 pounds a day as a hobby without the need for a collecting license.

Once your seaweed is home, sorted and clean, you are ready to dry. Lay a flat bed sheet out in a sunny location. Ideally you want your seaweed drying in the sun before 10:00 am. Take one piece of seaweed at a time and lay it out on the sheet. Separate the pieces you want to use for food, medicine, beauty and bath. Each one will be packaged, cleaned and handled differently. It should take three to five hours to dry your “catch” depending on the time of the year and the weather.

Seaweed for food can be ground before you dry it completely in order to get a “ground coffee” look.

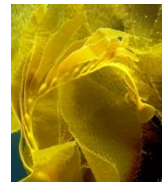


This can be spread out on a large plate to dry in the sun. Glass containers should be used and not metal. Ground seaweed is a convenient and easy way to add seaweed to food. Dulse, Nori, Sea Lettuce and Giant Kelp are great edible

seaweed options that can easily be added to everyday meals. Pretty much any instance where you would add salt to food, you can add seaweed. Seaweed used for food should only be picked on days when the tides are the lowest.

Anything eaten from the ocean should be at least 10 meters away from the shore. This is only achieved on days when there is a .00 or a minus tide. More attention and time should be given when selecting and cleaning seaweeds that will be used for food purposes. A recycled glass jar is the best way to store ground seaweed that you will use in your kitchen.

Giant kelp is a seaweed found on most beaches. When picking this seaweed, choose the green/gold, translucent, tender, young leaves and wash them well in the ocean before taking the sea vegetables home. After you take the seaweed home, place it in a used plastic bag and tie the bag closed. Depriving it of oxygen stresses out the seaweed, forcing it to release its internal magic goo. This is the best way to prepare the seaweed for a full body wrap or to add to a bath. For giant kelp, it is always best to use it fresh on the same day it was picked.



Kelping can become an activity that encourages you to interact with nature. When we interact with nature, we understand the need to protect, restore, and respect the natural world. We live our lives as if we are separate from nature when in fact, we are nature. We are the leaf,

the water, the wind and the dirt: protecting nature also protects our lives, future and health. Foraging gets you up close and personal with an element that has been here far longer than us. Foraging reminds us that we reside on a brilliant planet, and we are surrounded by genius.

HOME THALASSO THERAPY TREATMENTS:

WATERMEDICA

When first taking Thalasso therapy home, compare it to working out. Start with 15 minutes and slowly increase your thalasso time to 60 minutes or more. I always tell my clients, you never know how toxic you are until suddenly you are not. Start slow so your body has time to adjust and augment for the extra nutrients and increased functioning of clean organs and sudden rapid recovery time. You may not be used to your body functioning optimally, and taking it slow in the beginning is highly recommended. In the beginning, you will have lots of WTH moments.



THE WATER LIFE

LIFE WOULD BE EASIER IF WE
ALL TOOK IT WITH A GRAIN OF SALT.

Water is the one fundamental element of which most people admit they never consume enough. Water keeps things flowing and helps everything perform better.



We are a water species living on a water planet. Copious amounts of water are required daily, to irrigate our system and flush internal toxins. When we engage in a water life, we create a free-flowing waste removal system that helps the body perform its natural daily detoxification. Water detoxifies the body efficiently and naturally. Morning water rituals like

drinking and urinating are a key factor in the removal of excrement. Excrement should exit the body within 15 minutes upon waking up. The best way to kick start this process is to consume a warm/hot glass of water with salt as your very first activity of the day. I always keep a bowl of bamboo salt in my kitchen and by my bathroom sink. I consider bamboo salt my best mouth freshener and tooth “soap.”

I highly recommend starting out each day in a thalasso way. Once your feet hit the floor in the morning head to the kitchen. Take one to two grains of salt in your mouth as you heat water on the stove. Allow the salt to roll all around in your mouth and stimulate production of saliva. This process will clean your teeth and freshen your breath. Then drink a glass of warm/hot water and head to the bathroom. The weight

of the water in the belly paired with the heat will kick start peristaltic action. If you do not have regular bowel movements in the morning, this process will re- “potty” train your body. Creating a free-flowing waste removal system is key to longevity, detoxification and healthy aging.

SEA TEA

THE SUPER GREEN TEA



Sea-ing your tea can be a great way to consume a dose of internal sea medicine. I will assume that we all know how to make loose leaf tea on the stove. Bancha green tea is a great companion to nori and kombu. Place green tea leaves and a very small handful of a broken-up nori sushi sheet, and a few small pieces of kombu seaweed in a pot on the stove. Allow it to simmer for 10 minutes then steep for another 10. Run your sea tea through a strainer, let cool and enjoy. Bancha tea is a very strong, ancient Chinese medicinal tea. Seaweed will remove the bitter taste and make it much more palatable as the seaweed supercharges the tea with nutrients. In the morning, I make a large pot of sea tea and sip on it throughout the day.

I always dump the green tea and seaweed left over from my sea tea into my bath so nothing ever goes to waste. Green tea and seaweed are great companions and your skin will love the combination as well as your nose. If there are no plans for a bath these leftovers make great garden fertilizer.

Sea tea can be an essential part of your CRM daily ritual

MISO SOUP



Seaweed is easy to slip into your diet when you start your day with a bowl of miso soup. After my morning cup of hot water, I prepare my cup of miso soup. I consider it my beauty breakfast and the best way to get alginate/polysaccharides and seaweed into my internal system. Miso soup powder mix or paste can be found very affordably at any Asian market and sometimes even your local grocery store. Miso soup puts any cup of coffee to shame by delivering energy that comes with required nutrients that get my day going and my body revved up.

You can add mushroom, onions, garlic or even ginger to your soup, and eat it throughout your day as part of your CRM ritual

SOL BRINE THERAPY

SALT IS THE PLANET'S ORIGINAL CLEANER



As long as we have been “eaters”, we have cured and preserved our food with salt. Once upon a time we did the same thing with humans. Ancient bathhouses were the pharmacies of the day and they were in place to “cure” the population and to protect its citizens from epidemics and plagues that could wipe out a community.

A sea salt bath can provide a curing and preserving therapy right in your own bathtub. We can go back in time to visit the days of sol brine therapy to preserve skin and body with a simple, effective and affordable treatment.

A large 40-pound bag of water-softening salt can be purchased at any home shopping store and some grocery stores for \$4.99 to \$24.00 (potassium salts).

Many homes already come equipped with a water softener or salt water pool. The exact same bag of salt used to soften tap water can be used for home bathing. The amount of salt you use is totally up to you. I place enough salt in the tub so it does not all dissolve (three big cupful's). Once a month I take a bath with water and a half-bag of salt, packed on

top of me in the tub for 30 minutes. When you add 35-grams of salt per liter of water, this creates a saline solution that mimics the ocean.

When venturing into sol brine therapy, always start with the concept that less is more and work your way up to large amounts of salt in the bath.

Sol brine therapy benefits:

- Softens skin
- Moistures skin
- Lightens skin / dark spots
- Dissolves cellulite and fatty tissue
- Flattens moles
- Hydrates and “cures” dermal issues and exterior concerns
- Shrinks internal vaginal fibroids and protects a woman from breast cancer

After one treatment, you will wonder why sol brine therapies are not common knowledge. You can participate in this treatment as often as you like. Sol brine and algae baths can be rotated to create self-preservation rituals.

SEAWEED BATHING

Seaweed baths can be prepared in a variety of ways. You can search online for suppliers of sea powders and whole products. The American market is just starting to slip seaweed into the personal care industry. You can also visit my online store at www.amaseabeauty.com or www.thalassotherapist.com for all your home thalasso therapy supplies.

Seaweed can be collected from the beach, washed and used to line the bottom of your bath tub. You then add just enough hot water to cover the seaweed on the bottom of the tub and let it sit for 15 minutes before adding more water. Fresh hot water forces seaweed to release its polysaccharides, making them available to your skin. Always be very diligent when you enter the tub as it will be extremely slippery. Once you are in your bath, finish filling the tub and enjoy the natural decadence. After your bath, treat your garden to the left-over seaweed to assure nothing ever goes to waste.

Very few people are iodine intolerant. Before you engage in a sea bathing lifestyle, test your hands and feet in the water to be sure you do not have a negative reaction. Once you know your body loves iodine, feel free to enjoy a bath as many times a week as you like. Seaweed wakes up bath water and turns it into a soup of nutrients.

You will find it very difficult to go back to bathing in “naked” water. A seaweed bathing ritual will soon have you cuddling with seaweed and falling in love with baths.

WHOLE SEAWEED BODY WRAP FOR AN INTENSE FULL BODY IODINE TREATMENT



Dedicate four to six towels to your home thalasso treatments. The plastic you use for the treatments should be upcycled from used product and it can be washed and used several times over.

For a body wrap treatment, you will need:

- 3 - 4 towels
- Handpicked seaweed cleaned in the ocean
- Lots of repurposed plastic wrap
- Warm room
- 20-40 minutes
- Privacy
- Great sense of humor

Place a large towel on the floor and line it with plastic, cover the plastic with fresh hand-harvested seaweed. Freshly caught giant kelp that washes up on the shore works perfectly. It is best to wash the seaweed at the shore, to leave anything that may be living in it at the beach where it belongs. Towels used for this treatment may be put in the dryer for a short time beforehand to add heat to the infusion. When you are ready for your treatment, lie on the outer edge

of the towel on your dominant side. Make sure you are properly placed so both your head and feet will be outside of the blanket. From here, make yourself a burrito. Roll over until the towel is all around you and you are on your back again. Another towel should be set in place and ready for the head; prepare to rest and relax right where you are for 20-30 minutes. Once you are done, unroll and head for the bath. Take the seaweed with you and drop it in the tub. Soak for another 20-30 minutes and then air or sun dry while massaging the nutrients into your skin. Finish the treatment with a large glass of water and a cup of sea tea.

A pro tip: I recommend trying the “burrito” without the seaweed as practice before your first treatment. For the record, it’s hard to do this without giggling. Giggling is by far one of the best anti-aging strategies the world has ever known. No one can giggle and feel old at the same time, a laugh maybe, but a giggle, NO way. Giggling should always be encouraged as an anti-aging and longevity tool. Where there is laughter, there is wellness.

SEAWEED FACE AND BODY MASK

DOES CORROSION AND DECAY COME WITH AGE, OR DOES AGE COME WITH CORROSION AND DECAY?



Your kitchen and bathroom are your best defenses against the effects of time. If we can stop corrosion and decay, we can preserve youth to build a new aging model that includes wellness. Your local Asian market is your best beauty supply store in town. Here you will find various types of seaweed at a fraction of the cost because they are sold for food and not for beauty... shhhhh, don't tell anyone.

For your home skin treatments, you will purchase:

- Dried whole kombu
- Nori sushi sheets
- Seaweed flakes – if they are available
- Mixed bag of seaweed

One thing to keep in mind when it comes to seaweed: a little goes a long way. Seaweed will expand up to 100+ times its weight when added to water. Take a small handful of the seaweed of your choice and place it in a blender with about 15 – 20 ounces of water. A shake blender is the perfect size. I suggest you have a dedicated blender for your thalasso

treatments. Blend the seaweed with water until you have a thick, green paste and you are ready to be a home thalasso therapist.

Brush copious amounts of the seaweed paste on your face or desired body parts and let it dry. It is always best to plan this treatment right before a bath. It typically only takes 15 - 20 minutes for a complete treatment, but you can leave it on as long as you like. Expect to be very green. Once you have brushed the treatment on your body, allow it to dry. Standing in front of a sunny window is the best place to dry the treatment. Once it dries, it might begin to flake off. To avoid a mess, slip into the bath right before it becomes flakey and falls off your body. The seaweed will dissolve in the bath water, and you can bathe in it for another 15 - 30 minutes to soak up all the good stuff. When it comes to seaweed body masks and wraps, allow yourself to experiment to determine what consistency you like best. You can't go wrong when you use edible seaweed for beauty treatments, so allow yourself to have fun.

NATURAL THALASSO THERAPIES FOR COASTAL DWELLERS:

SEA STROLLING

For sea strolling, you will need:

- Seashore
- 30 - 60 minutes
- Eco bottle of fresh water
- Beach attire and walking shoes
- Beach hat and sunglasses - if you like to add a “coolness” factor

If you live at the coast it will be very simple to take on a thalasso lifestyle. Just like walking is the beginning of any fitness routine, beginning a thalasso life is no different. Walking at the beach will prepare you for more advanced thalasso treatments. According to thalasso theory, the body must begin the mineralization process before you



engage in other marine treatments. Sea air is naturally loaded with mineral vapors and ions, and you can smell where they are most concentrated. Everything about the beach is marvelous for your health, from the fresh air to the natural sounds and the cool blue color. It is very hard to be at the beach and remain depressed or grumpy. A regular walk at the beach for 3 - 4 straight weeks can get you on the road to feeling great and wanting more.

Walking, talking or running on the shore with a loved one encourages upper respiratory exchange of nutrients while the body is in motion. The ambiance of the ocean cannot be mimicked anywhere else. The blue water, smells, sounds, sun and sand are some of the most unique features to be found at the sea. We are all naturally drawn to the waters

of the planet, and a trip to the ocean is a great way to reconnect and remind yourself just how much nature is a part of your personal health and wellness model. The ocean is the essence of timeless beauty wrapped in a perfect package. A regular walk on the beach can help remind you to stay connected to yourself and the natural wonders of our world.

WALKING ON WATER

For walking on water, you will need:

- Bare feet
- Clothes that can get wet without concerning you
- Must be prepared to get wet below the knees

When you walk at the water's edge, take your shoes off and walk where the water laps at the sand. The cool waters are refreshing to the



body and it will take you back to your childhood. You might even find yourself scampering away when the water comes up above your ankles. Walking in the water will get you used to the cool water and the unpredictability of the waves. It's a great way to meet the ocean on your own terms while

being safe and sound with your feet planted firmly on the sand.

BREAKING THE WATER

Before you enter this level of Thalasso therapy, you want to be sure you have already made friends with the sea. If you start your Thalasso therapy treatments at this level it might throw you right out of the game of anti-aging before you even begin.

Water is powerful and it can be very intimidating. When we were younger it was no big deal getting tossed around in the water. But age does a funny thing to youthful exuberance. As we age, we get timid and avoid getting hurt because, well, it just hurts. With time we begin taking every precaution to make sure



that doesn't happen. As a result, we become cautious and take fewer risks. This can be a good thing in many instances, but in most cases it leaves us with our hands tied and unable to try new things. Getting tossed around in a wave is most definitely one of those cases. If there was ever a lesson in getting back to youth, playing in the ocean can teach it to you.

Where the waves break is where all those little ions and minerals become aerosol particles, and we suddenly have an ion orgy. Wading in this part of the ocean can rival any hard-core workout program. Wading in the water where the waves break will force you to work hard to keep your balance and you will constantly need to reset your footing; as a result, your heart rate will increase and your breath will quicken. I can pretty much promise you that your butt will meet the sand at least a few times.

The whole idea here is to keep your footing and let the waves beat the holy crap out of you. The sea can provide an amazing, naturally nutrient-rich massage that may leave you feeling like you got run over by a Mack truck, with all 10 wheels. At the end remind yourself - it is just water.

Expect that after a good night's sleep you will feel like a million bucks. Have a towel on shore already laid out and waiting for you. Do not use the towel to dry off; you want the minerals on your skin for as long as possible. Lay down on the towel and let the sun, sand and salt do their work on your integumentary (skin, hair, nails and exocrine) system. After 20 minutes get out of the sun and enjoy a large glass of cold water, sea tea and a fresh seaweed salad.

WATER FLOATING



You must have already spent time breaking the Water (above) before you are ready to float in its swells. In order to float, you have to break through the waves to get to the open ocean. Water floating takes place where the waves swell and move toward the shore to break. The purpose of this therapy is to free float and let the water move your body and free your mind without actually catching a wave.

WaTa and Watsu dancing are assisted physical therapy treatments performed in a heated pool, and they utilize the natural concepts of floating through space and forgetting about time. During water dance therapy, the patient is cradled by the therapist who then moves them through the water to assist in healing, joint mobilization and freedom of movement in buoyant water. It is a magnificent tool for MS, MD, spinal cord injuries and other neuro/muscular conditions.

Once you have walked beyond the breakwater and you no longer have a “bottom”, it is time to float. When you reach the area where you wish to float, all you need to do is lay back and let your feet float to the surface. You will already know your buoyancy by the time you get to this

level of your thalasso therapy treatments. If you are negatively buoyant (don't float) and need help floating, be sure you pick a wet suit that gives you the extra buoyancy so you can float.

Be sure to visit your floating destination during low tide. This is an important step to establish safety, as well as your own peace of mind. Checking out the area during low tide will reveal what you are swimming above. During low tide you can get a clear view of the underlying area so you can relax during your thalasso floating. It is important that sea floating be a relaxing and nurturing time when your mind can be at ease and your body can let go. Once you have reached this level of Thalasso therapy, hopefully you have become friends with the activity of the water.

I would always suggest that at the beginning of your thalasso journey, you sit on the shore and watch the sea. This will allow you to read the rhythm of the ocean. The movement of the ocean is a readable dance that can be predicted and it is not random. Once you see the predictable movement of the water in real time, participation in this movement won't feel so haphazard. Your mind will settle with contentment much quicker.

Let the floating begin. As an ex-yoga studio owner, I can guarantee you that floating in the swells can rival any bendy yoga class of today. Ocean floating is "letting go" at its finest. The idea is to relax and let the water carry you. This is not a time to worry, be afraid or harbor self-judgment. Floating can take us back to the time before we walked on land.

In the beginning the only focus should be relaxing in the water. You want to float at the back of the swells so you will not turn the therapy into a body surfing event. During the first 15 minutes, your only focus should be getting to know the rhythms of the ocean in conjunction with the reactions of your body and your mental state. It will take you 15 minutes to get used to the water temperature, wave rhythm and your bodily reaction before relaxation is even an option. Ideally you want to be a rag doll and let the swells push, roll and tug you around. With time this will become a beautiful dance with the water.

But by all means if surf's up, catch that wave. For safety's sake always be sure you have someone with you, or watching from shore.

SEA SWIMMING



The ocean can give any fitness routine one hell of a workout. Wetsuit, spring suit or bathing suit, the choice is yours, and you will only know what's best for you once you get in the water. You can add fins on your hands and feet and go for distance, or you can take a leisurely “stroll” in the water. Once you get used to the water and sea swimming, you will determine what gear you like best.

CONCLUSION

DAN FRYDA



Founder of Spa Technologies International,
Thalassotherapy educator and author of *The Ocean Within*

Thalasso therapy or the use of seawater, its vegetation and climate has attracted some 500,000 spa-goers in France each year to enjoy its therapeutic benefits. Water therapies in European spas are part of the culture, as is the origin of the word S.P.A. or Salus Per Aqua (Health through Water).

Here in the United States, there is only one known spa that uses the healing properties of seawater, in Montauk, NY. For most Americans, the art and science associated with Thalasso therapy are not readily available and remain elusive. Seaside spas in America are mainly outdoor gyms offering massage and other conventional therapies.

Now comes a book by Antoinette Marquez that shows us how we can bring the healing ocean directly into our kitchen and bathrooms. If the major seaside spas of America have ignored ocean therapies, Ms. Marquez offers valuable information on how to convert your bathroom

into your own personal ocean healing spa; your kitchen into your own personalized nutritional longevity center.

Based on scientific research, *Saving Beauty and Preserving Youth* is your ultimate "how-to book", offering practical applications of marine-based therapies. The best part is that these programs are affordable and easy to execute. From oral hygiene using sea salts to Calorie Restriction Mimicking with Vitamin Sea supplementation, readers will benefit from her years of personal experience harvesting fresh seaweed off the Santa Barbara coastline right into her home.

Skin rejuvenation is possible with fresh seaweed baths that deliver vital elements to nourish your skin deeply. Transdermal penetration of marine molecules restores and replenishes those nutrients missing from supermarket pseudo-foods. Your skin and body literally drink them up.

In this book Ms. Marquez shares with the reader her findings as a cottage algologist experimenting with seaweed to improve our quality of life. In her book you will find that she's come up with many strategies to bring the benefits of the sea into modern day living.

In short, read this book to enjoy total rejuvenation and transformation.

CONTRIBUTON:

RESTORING HEALTH & BEAUTY WITH THALASSO THERAPY & CRM

Irene Eve Nagle Reyzis, MD, MPharmSc

PART 1: WHAT IS HEALTH AND WHAT IS HEALTHY SKIN?

I ask you to think about health by picturing the human body as its own ecosystem. The body is made up of multiple components that each have a specific role to play in ensuring the overall functioning of the organism. The body requires resources and fuel to function properly, and it will function inefficiently if dealing with waste accumulation, dysfunctional components, insufficient resources or a toxic environment. If processes are allowed to become dormant over time they will become harder to turn on, and when they do it will take longer for them to rev-up and once again operate at optimal efficiency. Stress or damage that results in disjoining of cellular functions that depend and build upon each other will ultimately make it harder for the body to fulfill its number one goal - to survive and thrive.

The goal of an effective longevity program will be to make the body more resilient and adaptive to stress and more capable of healing itself from damage. The key to better, healthier living is not avoiding stress, it is training yourself and your body to deal with it more effectively and not let it lead to destruction and diminishment. Stress is an inevitable fact of life and that includes the stress of time as well as external damage caused by environmental factors like UV radiation, pollution and unhealthy foods. As opposed to allowing the body to succumb to the long term damage of stress (the root of all aging), the ultimate plan

to avoiding this is taking back control over one's health and assuming power over one's life.

There are two kinds of stress in this world - biological and psychological - and the two are not very far apart in terms of their impacts on our health and our livelihoods. Thalasso therapy provides a readily available, utilitarian tool box capable of helping individuals deal with both biological and psychological stress.

The beauty of the human body is found in both its complexity and its simplicity. There are many interconnected cellular processes that occur on a molecular level every second that carry out basic processes like manufacturing proteins and regulating metabolism. Yet the concept of the human body as a whole is that its structure is essentially a tube within a tube. We are one uninterrupted, unending surface of tissue that consists of skin that folds into the inner surface of the gut.

Being the outer surface, the skin is meant to serve as a barrier between our vital organs and the outside world. The gut is meant to digest and absorb essential nutrients that our cells need for fuel, as well as water which is the medium of all living processes in the body. Nutrients and water along with oxygen from our lungs are the main resources our body needs to survive. The skin's role as a barrier is not just protective, but conservation-oriented as well. The skin is structured in such a way as to keep water from escaping our bodies into the external environment. Therefore, the skin is a barrier in as much as it is a barrier out, as well as a living, dynamic collection of cells that together make up the largest organ of the body in terms of weight and surface area.

The skin's critical role as a barrier between the body and the external environment cannot be stressed enough. Beyond keeping essential elements such as water, oxygen and nutrients in, it keeps damaging elements out. The skin is designed to interact directly with outside stressors like microbes (e.g. bacteria and fungi), toxins, pollutants, UV radiation and varying external temperatures. The skin's role is protective so a lot of routine immune system activity takes place discretely within skin tissues. Immunity in the skin goes unnoticed until

something goes wrong such as when an open wound becomes infected or a dermatological condition arises like acne, rosacea, eczema or dermatitis.

The biology of the skin is all about balance. For the skin to be in good health, it requires a specific balance of many key elements:

- Microbes
- Moisture
- Natural oils (including sebum)
- Salt and electrolytes
- Nutrients
- Temperature
- pH levels
- Intra-skin immune processes
- Regeneration processes.

A major aspect of Thalasso therapy is its aim to treat the body both inside and out in a way that supports balanced, optimal cellular functioning. Since Thalasso therapy techniques provide replenishment of vital nutrients, minerals, vitamins and trace elements, they can reboot cellular metabolism and energy production, accelerate stagnant rejuvenation processes, and thus stimulate tissue renewal.

Body System Inter-Connectedness

Over the decades within scientific and medical communities there has been a growing understanding of just how interconnected our body systems are. The knowledge base surrounding the interdependency of factors like hormones, metabolism, neurological functions, immune components, resident microbes and cellular maintenance has been evolving and still is. There are many pathways by which one health factor can impact another, and the body as a system is designed to keep all these factors and related processes in balance, a state known as homeostasis or equilibrium.

Collectively the skin and gut (and to a certain extent the respiratory system as well) are given the task of interacting with our environment. That includes getting the nutrients we need to live (food, water, vitamins, minerals), as well as dealing with microbes, chemicals, toxins, pollutants, sunlight, radiation and other organisms. The skin and gut host a big portion of the three major bodily maintenance systems of extreme relevance to longevity: the immune system, the endocrine system (e.g. hormones and metabolism) and the neurological system. When one of these systems is thrown off balance the other maintenance systems can be disrupted as a result. A defect in one can cause weakened or compromised functioning of the others in some way, making the body more susceptible to disease and the aging processes. A common example of this is how psychological stress affects the body. When there is emotional trauma and psychological stress this also registers in one's neurological system. Once that happens there is an increase in stress hormone production by the endocrine system, as well as a decrease in function of the immune system. These changes may then manifest themselves as increased vulnerability to infections or sub-optimal gut functioning (as in Irritable Bowel Syndrome or IBS). In some people, stress may lead to muscular pain/tension or aggravation of skin conditions, as well as acceleration of the aging process. How many of us have ever experienced stress-induced acne or knots in our back muscles? Most any type of continual stress like not getting enough sleep or chronic pain conditions can lead to a degenerative chain of events.

Many common, chronic health conditions are essentially symptomatic results from breakdown of the body's core units of self-maintenance. It's impossible to understate how critical the aspects of balance and interconnectedness are to bodily functions. For instance, it is an established fact that metabolism pathways are linked to the body's immune response. Cell proteins necessary for regulating fuel uptake and utilization such as peroxisome proliferator-activated receptors (PPARs), toll-like receptors (TLRs), and fatty acid-binding proteins (FABPs) act as links between energy metabolism and inflammatory activation of immune cells. As a result of these links, obesity, metabolic imbalances and the disease state known as metabolic syndrome lead to dysfunction

in all sorts of body systems, including but not limited to the liver, brain, pancreas, muscle and endocrine glands.

Obesity causes an increase in inflammatory bio-chemicals circulating in the body, which are known as cytokines and include IL-6, IL-10, ACE, TGF β 1, TNF α , IL-1 β , PAI-1, and IL-8. The scientific evidence supporting that excess body fat and caloric intake (metabolic stresses) put the body in an inflammatory state is abundant. It is no wonder that obesity is linked to chronic diseases like diabetes, insulin resistance, hypertension and heart disease.

Being in a state of low-grade inflammation explains why excess calories lead people to feel run-down and sluggish as opposed to feeling energized. Why is it that chronic over-eating will cause people to feel less energetic and vigorous? The body is not programmed to switch its metabolic processing of food from a low-food-availability state to a high-food-availability state based on the amount of food you eat. Throughout human history most people didn't get enough food to eat, and thus the body is programmed to not waste excess calories even when they are constantly available. The body's basal metabolic rate or BMR (baseline calorie burning outside of what's needed for movement) is not practically adjustable depending on how much you eat.

There is hope for health

Modern science has given us many insights into the aging process and ways that the body may be programmed to maintain itself and suppress degenerative processes. It is now a possible prospect through cellular technologies to influence the factors underlying aging.

The first step in overcoming aging is to capture the essence of what the aging process is. From a scientific perspective aging comes in two forms - intrinsic and extrinsic. Intrinsic aging is the bodily expiration date - in other words it is the time-related breakdown of cellular elements and bodily tissues that occurs simply out of virtue of being old. It relates to your body simply being physical matter in existence for a prolonged period of time. A rubber band will become brittle if it sits in a drawer long enough, no matter how much you use or don't use it, and so will bodily tissues like muscle, collagen and elastin.

The silver lining is that body tissues are alive, and they have regenerative abilities and are capable of cellular turnover. Also, they can be programmed through DNA to be in different functional states. Cells have on/off switches throughout their DNA to put themselves in different modes, including repair mode and regeneration mode. It is thought that intrinsic aging is regulated by genetics; genes and DNA play a role in determining how long a cell can last before it can no longer sustain itself.

What does it mean for a cell to sustain itself? For a cell to be viable, it must have fully functional cellular machinery, which includes mitochondria for making energy and a whole lot of manufacturing centers for making biomolecules like proteins that in turn make body tissues like muscle, collagen, neurons, etc. Extrinsic aging is the hastening of cellular and protein breakdown beyond intrinsic aging through external factors like lifestyle, diet, environment, UV radiation and oxidative stress caused by free radicals. Extrinsic aging is the toll your body takes because it has been exposed to additional stresses other than time alone. It's important to realize that both processes happen simultaneously to some degree in everyone, and it's impossible

to completely separate the two when observing the aging process through scientific investigation.

PART 2: WHY DO WE AGE?

A good way to think about aging is to liken it to the financial concept of compound interest. The baseline or principal damage that happens to your cells and tissues is related to your genes, and over time damage is accumulated. The more damage that accumulates, the greater the potential to incur further, more serious damage. From time to time extra damage may be deposited into your account based on extrinsic factors.

Aging is often thought of biologically as cumulative damage from stress within the body, considered the "wear and tear" theory of aging. Time itself can be considered a bodily stress. There is no one predominant explanation of what physiologically drives the aging process; if it is genetic damage and deterioration that comes first, or cellular protein deterioration that then makes it harder to accurately express genes which in turn further compromises cell integrity. Most scientists take the viewpoint that aging is most likely an overlapping occurrence of various breakdowns in cellular components—genes and proteins—that integrally affect the function of other components.

You don't need to be a scientist to think of the body and individual cells in the most essential way to describe them: "form follows function." Everything in the body has a particular structure to allow execution of a particular function. If the structure of something is fundamentally compromised, the function is compromised, and the other cellular components and biological pathways that depend on that function are then compromised.

The end result systemically is sputtering out of various bodily functions that certain cells are responsible to maintain. For example, if the hormone-producing cells in an endocrine gland lose function, the body

will see a reduction in the end hormone product. This could be a reduction in thyroid hormone or sex hormones like testosterone and estrogen that inevitably happens with age. As there are multiple body systems, they will likely not all lose function at the same rate as the body ages. Body system interdependency is inherent and as one system declines, it can impact functioning of others. Functional and structural optimization of the whole body on the level of every system is thus a fundamental part of a sound longevity approach.

The question is how to make bodily and cellular optimization obtainable for most people, and the answer lies in Thalasso therapy in both its physical and mental benefits. Consider for a moment what inspires people to change their normal routines and habits in the pursuit of longevity and a better state of health? Promises of weight loss and increased lifespan from strategies like eating healthier foods and exercising aren't usually enough to get people to put in the effort needed to change health outcomes.

The proposition of Thalasso therapy for better health isn't focused on restricting people's ability to eat indulgent foods or their right to skip the gym after work. It's more focused on adding an element to your life that is currently absent from the average American lifestyle, and that element is the sea. The core concept is giving your body what it's missing in order to feel good enough for it not to be a struggle to exercise regularly or avoid unhealthy foods. If your Thalasso therapy program leaves you feeling youthful and bounding with energy as if you were a child, perhaps you won't reach for that sugary midafternoon snack to give yourself a pick-me-up. Perhaps you won't feel so sluggish that you don't see the point in engaging in physical activity. Perhaps you won't feel so depressed or nervous that you resort to emotional overeating. This is really the key to sustainable healthy living and getting people to take better care of themselves. The first step is not removing the behaviors that substitute for how we want to feel, but including practices and therapies that get you to feel how you would like to that you wouldn't need those substitutes.

PART 3: WHY THALASSO THERAPY & CRM WORK

Why is it that supplementing the body through Thalasso therapy techniques and engaging in the practice of CRM helps the body heal itself and recover from the process of aging? The basis of this is through a three-pronged approach, much like a triton piercing through the cyclic web of dwindling body function. The perfect triad of enhancing body function, brain function and mood function with the same therapeutic method is why it is far more stable and fool-proof than other types of healthy living regimens. Scientific evidence supports in multiple ways how one arm effects the other, and how CRM can support each arm that holds up and sustains a youthful state of being. A tripod is used for mounting cameras because the three-point contact is the most stable and adaptable type of support available for securing an object. Why not use a similar approach to care for yourself and to fulfill your quest for graceful aging?

To date there are not a lot of mainstream approaches that effectively, continually and sustainably reset the neuroendocrine, hormonal, metabolic and immune status of the skin (and body as a whole) to be in longevity mode. Yet as far back as the 1930s, laboratory studies have shown that rodents fed calorie-restrictive yet nutritionally complete diets (with vitamins, minerals, etc.) live significantly longer compared to control groups not subject to calorie restriction. Laboratory studies with yeast cells have shown cellular lifespan to increase as a result of caloric restriction through its effects on mitochondrial energy pathways and metabolism.

More recent research on the effects of calorie restriction has shown that there are specific biochemical pathways it activates to reprogram and turn on the body's ability to repair itself and handle stress without incurring lasting damage. The group of enzymes called sirtuins are recognized as control factors for the aging process. They act through genetic pathways to reduce the activity of nuclear factor kappa B (NFkB), a biomolecule involved in the inflammatory process. Suppression of NFkB has been shown to reverse signs of aging, and stimulation of

sirtuins can slow rates of cellular degeneration and apoptosis (cell death). Some small bioactives like resveratrol have the ability to increase sirtuin activity, but caloric restriction is the most effective way known for keeping sirtuins turned on and NFkB turned off.

CRM has been scientifically proven to increase both metabolism and immune function, and through these mechanisms have an impact on longevity. When cells are forced to focus on survival and efficient operation, they cannot afford to keep dysfunctional biomolecules in the system, and dysregulated cellular processes become too expensive to run. The cell has its own economic structure when it comes to use of resources like nutrients and protein machinery. A system forced to function at optimal efficiency through CRM will do so out of the evolutionary principle of survival, which in turn translates to enhanced cellular longevity. The longevity revolution as it relates to Thalasso therapy is really about taking this information seriously and integrating it into our lives through practical means.

Seaweed under the microscope

The nourishing aspects of seaweed and marine products are critical for understanding why Thalasso therapy works for enhancing skin health and bodily vitality. Seaweed is packed with nutrients and minerals that are good for the body whether you ingest them through your mouth or absorb them through your skin in the context of baths or skin care products. It is a high bang for your buck nutritionally and as Antoinette mentions in early chapters, the nutritional profile of seaweed is superior compared to most any conventional land food. One reason is that the minerals and trace elements are bound and stored within special carbohydrates like alginate, agar and carrageenan that make them move bioactive and available to the body.

Seaweed helps with re-mineralization and rebalancing of cellular activities through optimal nutrient bioavailability. The built-in delivery mechanism is based on its unique biochemical structure and its ability to exude mineral-packed polysaccharides when wet. Marine carbohydrates bind water extremely well and can infuse themselves into

skin and body tissues, bringing nutrients, intense hydration and healing benefits along with them.

Seaweed is a natural tissue healing aid in more than one way. It's common for polysaccharides from seaweeds to be used in wound dressings and as topical agents in wound care. A lot of pharmaceutical research is devoted to harnessing the ability of seaweed polysaccharides to promote tissue regeneration and enhance delivery of pharmaceutical actives. Laboratory studies also have described sulfated polysaccharides from seaweed as having antiviral properties - particularly they have the ability to bind with viral components and block interaction of viruses with cell surfaces. Some seaweeds have been shown in clinical settings to speed healing of skin lesions caused by herpes simplex virus.

As seaweed relates to the mechanisms behind CRM, anti-aging and longevity, many marine extracts have been studied for their immune-boosting effects. Specifically, seaweed extracts have been observed to activate immune cells like B lymphocytes (memory cells) and macrophages (cells that "eat" and digest foreign invaders like pathogens). In a clinical setting these extracts are thus useful for the management of immune function.

It is not just some amazing coincidence that consumption of seaweed has also been linked to improved metabolic functioning and cardiovascular health. Daily consumption of seaweed on a regular basis has been shown to help reduce high blood pressure, lower serum cholesterol and decrease waist circumference. Ingesting seaweed phytochemicals and polysaccharides helps people reduce their mean caloric intake with less conscious effort because of effects like appetite suppression, normalization of metabolism, and feeling satiated for longer between meals.

In the realm of reproductive health, studies comparing the population of women in Japan to the US have suggested that seaweed consumption has a preventative effect towards development of breast cancer. The rate of both pre- and post-menopausal breast cancer is lower in

Japanese women and part of the reason behind this is that Japanese diets are rich in seaweed. In a handful of clinical studies, it has been shown that seaweed can affect body estrogen levels and help with elimination of certain estrogen metabolites from the body. Additionally, seaweed and seaweed-derived compounds are supportive of vaginal health and have been used to help women with the gynecological condition vaginal atresia (which is essentially thinning and deterioration of the wall tissue).

Really all body interface surfaces--the skin, the gut, the female reproductive tract, the nasal cavity--are ideal places to apply seaweed for positive health effects. All body systems apply and all body systems benefit.

Smart seaweed

Seaweed is a great food for your brain and central nervous system (CNS). It is one of few vegan sources of DHA, a type of Omega 3 essential fatty acid that is important for healthy brain function. Some species are capable of modulating neurotrophic factors in the brain, which is a new and very promising area of therapeutics. You may have heard of supplements being referred to as nootropics; essentially these are agents which can enhance the levels and/or functioning of neurotrophic factors in the brain and nervous system. Neurotrophic factors are natural biomolecules responsible for supporting developing neurons and maintaining health of mature neurons; they are the caretakers of the nervous system. Certain marine extracts have been shown to help the brain and nervous system by promoting engagement of neurotrophic factors to enhance the growth and function of neurons. Additionally, some extracts increase activity of synapse elements like the NMDA receptor. When this happens in brain areas such as the hippocampus, it can boost memory as well as modulate mood and emotional responses.

CRM has been studied for its effects on brain function and evidence shows that it can increase levels of the endorphin BDNF. Endorphins impact a lot of body functions like appetite, immune function and sensitivity to pain. They also create mental effects like joy, contentment, interest in sex and a sense of wellbeing. They can be increased by a number of activities and substances like exercise, sunshine, chocolate, sex, touch (massage), good food, good smells, antidepressants and compulsive behaviors like shopping. Many of us because of our lifestyle are living in a state of endorphin deficiency where we are constantly seeking satisfaction and having cravings for pleasure, rewards, comfort foods, tobacco, the list is endless. Conditions linked to low BDNF include depression, bipolar, OCD, dementias, autism and eating disorders. Chronic low BDNF can cause shrinking of brain areas linked to mood and memory, specifically the hippocampus. What's even more interesting is that the western diet has been proven to do the same thing.

CRM can mediate immune function, inflammation, metabolism and the body's stress response and thus improve brain and mood function

as evidenced by its ability to increase BDNF. Seaweed complements as a supply of DHA, nootropics and essential nutrients for optimal functioning of neurons and all cells in the body. Additionally, seaweed has been shown to mediate bacterial populations in the gut. The state of the gut bacteria in turn has been shown to have strong links and dramatic impacts on the function of both the immune system and the CNS. In essence, inflammation, the western diet, overeating, excess fat, low endorphins, deranged gut bacteria, compromised brain function and depression are all linked together. They are manifestations of stress getting the best of you, where the aging process is unregulated and left to run amok. CRM, Thalasso therapy and marine supplementation are attainable, highly effective tools for counteracting stress-induced pathologies.

Thalasso therapy and CRM will help put all body functions back into balance without feeling like you are going through unpleasant periods of self-deprivation that are often associated with serious diet and detox programs. They are a more digestible, more nourishing direction of self-repair compared to most conventional healthy living programs available today

PART 4: HEALTH MANIFESTS AS BEAUTY

Very frequently with skincare products, any improvement in skin appearance experienced by the user is mostly a result of temporary surface reconditioning. Results are often based on low-cost moisturizers that bind water in the top skin layers to plump the tissue and reduce roughness, making the skin softer and smoother and thus appear younger. However, this effect is temporary and superficial, and not reflective of the health status of the living skin cells below; it lasts only for as long as the top layers last, which is not long because they naturally shed and replace themselves on a continual basis. Superficial skincare ingredients will also not withstand the effects of harsh skin cleansing, where the top skin layers are stripped of their lipids as well as any topically applied emollients or moisturizers.

Skin that is dry is not usually receptive to absorption of water-soluble nutrients and ingredients, and that includes most carbohydrates, proteins, minerals, water-soluble vitamins and many botanical extracts. The water-soluble vitamins include B vitamins (B1, B2, B3, B5, B6, B12) and the forms of Vitamin C called ascorbic acid or sodium ascorbate. It is typical for water-soluble actives in skincare products to just sit on the skin surface and never reach any deeper layers of living skin cells. Delivery is a big factor with respect to the potential for any topical ingredient to actually provide real biological benefit.

Thalasso therapy skin treatments like baths, gels and masks cause rejuvenation of the skin by a very effective process. When treating skin with thalasso methods, the marine carbohydrates, humectants and minerals penetrate and bring water with them into the upper skin layers that are usually dehydrated. This creates an access route that is not normally there for letting water-soluble goodness through and cellular waste products and toxins out. This effect is especially pronounced in the context of a thalasso bath where the water provides a fluid medium for these processes to occur.

There is beauty in bathing

It is not a strange concept to most of us that baths can be used for therapeutic purposes. Bath salts are sold in many places from drug stores to high-end skin care boutiques for the purpose of turning bath waters into a healing soak. Usually the salts are based on sea salt or Epsom salt, sometimes baking soda, or a mixture of any of these three. Frequently the salts are mixed with essential oils aimed at providing secondary benefits like enhanced relaxation, mental invigoration or relief from muscle soreness.

Using salts in the bath is a commonplace concept, but to most of us using actual seaweed in the bath is a rudimentary, primitive and completely foreign concept. Strangely it is novel for us to think that we should enhance our bathing experience with not just salts from the sea, but plants from the sea. It is an obvious next step that takes us even further back to the core experience of being in the ocean and actualizing its balancing effects on our body. You might say that being in the ocean is part of the collective unconscious of being human, as we all came from life that first existed in the waters before it came to dwell on land.

Seaweed is particularly well-suited for bath water augmentation due to its biochemical make up. Upon contact of dried seaweed with water, the carbohydrate structure hydrates and transforms stored vitamins and minerals into active form, forming a thick, nutritious, gel-like solution exuding from the surface of the sea leaves and into your bath. This is a far more sophisticated and biologically identical way of exposing your body to healing nutrients like magnesium, calcium, potassium, sulfur, iodine and zinc. Seaweed takes it a step farther in helping you assimilate nourishment and minerals through your skin compared to using bath salts alone.

Bathing with seaweed provides a very intense moisture infusion and exquisite skin healing benefits. When it comes to moisture content of skin in its normal, dry state, the bottom layers of living cells require both

inter- and intra-cellular water, and the uppermost layers of protective dead skin cells tend to be relatively dehydrated. When the body is immersed in a Thalasso bath, the top layers of skin cells become replenished with biologically active water. This causes the skin surface to be more permissive towards transport of nutrients into and release of toxins out of the deeper skin layers. The body will be rejuvenated, the skin will be conditioned, healthful and glowing with reduced redness, and the bather will feel deeply nourished.

Whether you supplement your bath using seaweed, sea salt or both, a big reason this approach is better than using straight tap water (plus or minus soap) has to do with osmotic properties of the water versus your body tissues. The best way to get many nutrients into your body through your skin is through an isotonic medium that is similar to your body's own blood serum and tissue fluids. When you add salt, minerals and carbohydrates to water through use of marine products, you increase the tonicity of the water and effect the process of osmosis. Tonicity is just a word that refers to how concentrated water is with dissolved ions and electrolytes. Distilled water has very low tonicity while sea water has high tonicity. The blood and body tissues have a set ideal tonicity level that influences the localization of water within the body in order to maintain that level.

When the body is placed in a hypotonic environment such as bath water with no salt or minerals, osmotic forces want to push that water into the body, but the body resists in order to prevent cells from getting water-logged. When the body is placed in a hypertonic environment like concentrated salt water, this tends to draw water out of the cells which can aid detoxification. The most ideal situation though is to place the body in water that is isotonic when it comes to its salt (electrolyte) and mineral content. This allows for the free and equal exchange of nutrients in, toxins out. Much like how coconut water is promoted as being good for oral consumption due to its isotonic electrolyte concentration, seaweed and sea salt baths can replenish skin in a balanced way and assimilate nutrients into the skin with greater ease.

It is also noteworthy that specific minerals present in sea products have their own therapeutic benefits when delivered into the body through the skin. Sea salt containing high amounts of magnesium will be even more helpful for muscle relaxation, as magnesium has the ability to relax muscle contraction on a cellular level. Magnesium sulfate is actually administered in the medical setting to pregnant women entering labor prematurely and/or with hypertension complications. In the context of a warm bath, dissolved magnesium penetrates the skin and is extraordinarily potent in its ability to relieve tense muscles and provide a general sense of calm and wellbeing. Heat speeds up biochemical processes, and having the therapeutic action of minerals take place in a bathtub with whole-body immersion in warm/hot water is nothing short of an ideal scenario.

It is certainly not to be ignored the value that baths have simply out of virtue of being stress-relieving. They provide a much-needed time-out from stressful situations and mental burdens. They bring you back to the basic elements of water and sound, refocusing your senses and emerging them into a rejuvenating, healthy, comforting activity. Bathing is one of the main elements of self-care, and doing so with Thalasso baths maximizes the benefits to be gained from this core activity of life. Bathing beauty is not just a verbal exercise of alliteration, but a message regarding the aid baths can give towards the maintenance of wellbeing and bodily youthfulness.

PART 5: “THE DOCTOR IS IN” ON THALASSO THERAPY

Being a cosmetic scientist I've read and heard a lot about aging as it is very relevant to one's external appearance. As I'm in my early thirties, I've also started thinking about aging as it relates to myself and how the once constant vigor of youth seems to just fade more and more as the years go by. I would be lying if I said my adult years have treated me like I expected they would when I was young. I did not anticipate having chronic back pain, I did not anticipate my feet, ankles and legs aching as much as they can sometimes after a couple miles' jog around the neighborhood. I did not anticipate having a tough time finding the right balance with my life, my time and my routines that it would be a struggle to take proper care of myself even without having children. I did not realize how much the stress of being a working adult in America amongst a dehumanized culture would take a toll on me. The combination of stress, living in a polluted area, and having been laissez-faire with sun exposure when I was young has started to show its signs in my skin already.

I've always known it's important to exercise and eat healthy, and the importance of taking care of one's mental and emotional health I cannot underestimate and I personally have learned this the hard way. Yet beyond these core tenants, new keys to healthy living have revealed themselves to me and they have a lot to do with the longevity revolution and the principles behind CRM and Thalasso therapy.

One of my first Thalasso therapy discoveries was the importance of adding essential minerals and trace elements to my diet (usually by adding concentrated mineral drops or powders directly into my drinking water) in order to avoid aching muscles and chronic fatigue. It dawned on me that in other countries all the bottled water comes from mineral springs or at least has substantial minerals added to it; the content of minerals is usually listed on the label as a normal thing. My research into CRM, seaweed, magnesium, iodine, zinc, sulfur and iron have taught me

so much about what the body and skin really need to function optimally. I really have a great tool box now for helping myself and others move through adulthood with grace and beauty, and without worrying about where to find the energy to take on life's challenges. I don't have to worry because there is an answer, and the answer is using knowledge as power for the longevity revolution.

We know more about the body and cells than we ever have, the challenge at this point is changing our culture to implement what we know in the scientific community for the good of all people. With change always comes resistance, but when the gain to be had is something as worthwhile as functional, healthful aging, it's worth the friction required to ruffle the feathers of the status quo. We've already been doing a good job with the movement towards raw foods and eating fresher, less processed foods as a nation. Let's keep the momentum going with not just the food and cosmetic industries, but also the pharma and medical industries as well. If we can get them to be more holistic, society as a whole will be much better off.

From my involvement in this book and research into Thalasso therapy, I have found that there are many therapeutic applications for seaweed and marine products; the list is so numerous that I still have a hard time believing this area of alternative healing has been underplayed for as long as it has been. As described in earlier chapters, the health benefits of marine products include, but are not limited to, properties of being: nutritionally complete, antiviral, anticancer and immune-boosting, as well as balancing of the metabolic, hormonal, gastrointestinal and neuronal systems. Outside of the question of "why didn't we hear about this missing link to improved wellbeing and healthy aging sooner?" the remaining question is how can those of us removed geographically or situationally from the sea bring its benefits into our lives. Like discovering the underwater treasures of a ship sunk long ago, this book bequeaths answers to better health and beauty coming from a timeless healthy living approach that is Thalasso therapy; an approach that has been mostly forgotten by society - until now!

CONTRIBUTING AUTHOR:



Irene Eve Nagle Reyzis MD, MPharmSc is a cosmetic science expert, ingredient guru, and innovative formulator. Irene attended college at Case Western Reserve University and earned her bachelor's degree in Chemistry in 2006. She then attended medical school at Drexel University and earned her medical doctorate in 2010. Since then she's been in the cosmetic industry functioning as an expert in the science and technology of cosmetics, skin care and personal care products, and topical OTC products. In 2015 she completed a graduate program through the University of Cincinnati and earned a Masters of Science in Pharmaceutical Science with an emphasis in Cosmetic Science. With this kind of educational background alongside six years of industry experience and her creative ingenuity, she is able to formulate and develop innovative, quality products with advanced therapeutic properties. She is extremely devoted to the creation of products that are in line with her principles and ideals of effective, results-oriented, toxin-free skin care and sourcing of sustainable, earth-friendly materials with minimal environmental impacts. With the rest of her career she is looking forward to seizing opportunities to exercise these principles by creating products that respect consumer rights and bring users satisfaction with respect to quality and results.

NEED TO SEA MORE?

Continued reading:

If you wish to expand your knowledge beyond the pages of this book, I have compiled some of my favorite links. I encourage you to check them out and SEA what you find.

<http://www.harmonikireland.com/sea-water/>

<http://www.ryandrum.com/>

<http://www.seaweed.ie/index.php>

<http://www.spamanagement.com/education/thalaso/thalaso.html>

<http://oceanplasma.org/home.html>

<http://www.cityofbath.co.uk/>

<https://www.nioz.nl/seaweedcentre>

www.greenwave.org

<http://www.noaa.gov/>

<http://www.watercure.com/>

<http://recipesandremedials.wdfiles.com/local-files/article%3A11/Brine%20Therapy%20notes%20lg%20print.pdf>

<http://balneology.org/>

<http://www.theseagardener.ie/>

www.thalassotherapist.com

www.pharmesea.com

www.amaseabeauty.com

GLOSSARY:

Ama Divers: Korean, Chinese and Japanese women who were lifelong free divers and dove to collect seaweed, shellfish and other sea goods. Diving was their livelihood and how they supported their villages and their families. Eventually the pearl would be cultured and resultantly Ama divers became specialized in a lucrative new venture. The Ama divers are currently at risk of extinction.

AMPK: Adenosine monophosphate-activated protein kinase is an enzyme that plays a role in cellular energy homeostasis, muscle glucose uptake and the modulation of insulin secretions by the pancreas. It is expressed in a number of tissues, including the liver, brain and skeletal muscles. AMPK is considered the master switch that activates cellular longevity.

Apoptosis: the biological process of genetically programmed, organized cell death.

ATP: ATP transports energy within the cell for metabolism. ATP plays a major role in cellular function and DNA synthesis.

Autonomic nervous system: Regulates the unconscious body systems such as the heart, lungs, hypothalamus, digestion and sex drive. This system is the primary mechanism for the flight or fight response, or the freeze and dissociate response.

Ayurveda: 2000-year-old folk medicine system based out of India and typically paired with yoga. After Brittan colonized India, the practice of Ayurveda was forbidden and it has only re-emerged in the last 100 years due to the widely accepted practice of yoga.

Balneo facility: A bathing facility where thalasso treatments and other water treatments are carried out.

Bamboo Salt 9x Roasted: Korean sea salt roasted 9x's inside a 3-year-old bamboo stalk. The ends are sealed with a yellow mineral-rich clay. The salt is cooked three to nine times for 10 hours at 1000-1500

degrees Celsius. It was developed in Korea over 1000 years ago by Korean monks and doctors as a folk medicinal remedy for a variety of illnesses and therapeutic uses including: cancer, obesity, dental treatments, anti-inflammatory, diabetes, arthritis. In Korea it is called Jukyeom.

Blood sugar: The amount of free glucose (sugar) present in the blood of a human or animal. The body naturally regulates blood glucose levels within a tight margin as a part of metabolic homeostasis.

Cell proliferation: The internal growth and replication of cells within a body tissue.

Cellular activity: The required processes for supporting cellular function and the propagation of new cells. This includes detoxification, the maintenance of inner cellular power and cellular longevity.

Cellular components: The micro-anatomical structures that make up a cell. Each cell has its own DNA sequence, membrane, mitochondria, organelles, proteins and nucleic acids. The major cellular components are located within the cell.

Cellular longevity: The extension of the life of a cell.

Coenzyme: Small, organic, non-protein molecules that are required by certain enzymes to carry out their chemical duties. A number of water-soluble vitamins such as Vitamins B1, B2 and B6 serve as coenzymes.

Collagen: The most abundant protein in the human body which holds the whole body together. It is found in bones, muscles, skin and tendons. Collagen forms a scaffold to provide strength and structure to the body.

CRM: Calorie restriction mimicking or calorie restriction mimetic. CRM is a hypothetical class of dietary supplementation or drug candidate that would in principle duplicate the substantial anti-aging effects that calorie restriction has had on laboratory animals. CRM is defined as a reduction in calorie intake of 20% (mild CR) to 50% (severe CR) without

incurrence of malnutrition or a reduction in essential nutrients. The benefits of CRM can be interpreted as arising from the mild stress induced in an organism, which activate inherent compensating mechanisms that improve the overall protection against stress.

Dan Fryda: Spa specialist and owner of Spa Technologies.

Degenerative disorders: The result of a continuous process based on degenerative cell changes, affecting tissues of organs, which will increasingly deteriorate over time, whether due to normal bodily wear or lifestyle choices such as exercise or eating habits. Degenerative diseases are often contrasted with infectious diseases.

Detoxification: The removal of toxins from the body.

DNA: Deoxyribonucleic acid is a biomolecule that carries most of the genetic instructions used in growth, development, functioning and reproduction of all known living organisms and many viruses.

Dominion: To master, control or hold power over something or someone.

Dr. Aziz Sancar: Turkish American biochemist specializing in DNA repair, cell cycle checkpoints and circadian clock. He won the Nobel chemistry award in 2015. He was part of a triad of scientists who verified that DNA can be repaired.

Dr. Paul Modrich: A Duke University biochemist who won the Nobel chemistry award in 2015. He was part of a triad of scientists who verified that DNA can be repaired.

Dr. Rene Quinton: Dr. Quinton was a French physician who observed that ocean water is quite similar to human blood and made it drinkable and injectable. He used a homeless dog in an experiment to prove mammalian plasma can be replaced with ocean water. He also played a significant role in the history of aviation. He opened the first flight school in 1908.

Dr. Richard Russell: (26 November 1687 – 1759) was an 18th-century British physician who encouraged his patients to use a form of water therapy that involved the submersion or bathing in, and drinking of, seawater. The contemporary equivalent of this is Thalasso therapy, although the practice of drinking sea water has been largely discontinued. He wrote "The Seawater Cure" in 1755 and was instrumental in creating a seaside medical society.

Dr. Tomas Robert Lindahl: A Swiss-born British scientist specializing in cancer research. He was part of a triad of scientists who verified that DNA can be repaired.

Endocrine system: The collection of glands in an organism that secrete hormones directly in to the circulatory system to be carried towards distant target organs. The major endocrine glands include: pineal, pituitary, pancreas, ovaries, testes, thyroid, parathyroid, hypothalamus, gastrointestinal tract and adrenals. Hormones produced are meant to regulate metabolism, growth and development, tissue function, sexual function, reproduction, sleep and mood, among other things. This system could be considered our own internal chemical manufacturing plant.

Enzymes: Enzymes accelerate and facilitate chemical reactions within a cell. The set of enzymes present in a cell determines which metabolic pathways occur in that cell.

Exocrine glands: Glands that produce and secrete substances onto an epithelial surface (such as skin, airways or gut) by way of a duct: sweat, salivary, mammary, ceruminous, lacrimal, sebaceous, and mucous. The liver and pancreas are both exocrine and endocrine glands.

Extremophiles: In the 1980s and then again in the 1990s, biologists found that some microbial life has an amazing flexibility for surviving in extreme environments – niches that are extraordinarily hot or acidic, for example – that would be completely inhospitable to complex organisms.

Folk medicine: Healing systems that developed over generations within various societies before the era of modern medicine. The World Health Organization (WHO) defines traditional medicine as "the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences of indigenous or different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness."

Foraging: When a person or animal searches for food in the wild.

Fucoidan: Polysaccharide found in brown seaweeds known to render medicinal effects.

Fucoxanthin: Is a pigment in brown seaweed. Fucoxanthin is being looked into for its anti-inflammatory, anti-nociceptive (anti-pain) and anti-cancer effects. A study has shown that fucoxanthin has strong effects on oxidative stress, oxidative stress-related diseases, and cancers.

Gene expression: The process by which information from a gene is used in the synthesis of a functional gene product such as a protein. The process of gene expression is used by all known life.

Hormones: A group of signaling molecules that are produced in the glands and delivered via the circulatory system.

Immune system: The body's defense system that protects against disease, bodily stressors and infectious organisms (pathogens). Through a series of biological processes called the immune response, the immune system detects and eliminates organisms and substances that invade body systems and cause disease.

Integumentary system: The integumentary system is an organ system consisting of the skin, hair, nails, and exocrine glands. The skin is only a few millimeters thick yet is by far the largest organ in the body. The average person's skin weighs about 10 pounds and has a surface area of about 20 square feet. Skin forms the body's outer covering and serves

as a barrier to protect the body from chemicals, pathogens, disease, UV light, temperature variations and physical damage. Hair and nails extend from the skin to reinforce the skin and protect it from environmental damage.

Iodine: A necessary trace mineral for thyroid function that is essential for normal growth and development. About 70-80% of iodine in the body can be found in the thyroid gland in the neck. Deficiency happens most often in pregnant women. Lack of iodine during pregnancy can impair mental development of the fetus. Premature infants are most at risk due to separation from mothers' iodine supply.

Ishigami-san: The honorable stone goddess in a museum in Japan that represents the spirit of the Ama divers.

Kelping: The collecting of wild seaweeds in their natural environment.

Klotho: Transmembrane protein that provides control over the sensitivity of an organism to insulin and appears to be involved in aging. It was discovered in 1997 and its namesake comes from Clotho, one of the Fates in Greek mythology. Clotho was responsible for spinning the thread of human life. She determined when someone was born and when they would die.

Longevity: The extension of life expectancy of an organism.

Longevity pathways: Longevity pathways are involved in an array of different processes including metabolism, stress response, cognition and brain plasticity. Current scientific studies reveal mTOR, SIRT and sirtuins as newly discovered longevity mediators that impact healthy aging processes and degenerative diseases. They bring new insights and a better understanding of the signaling mechanisms underpinning neurodegeneration and how these differ from physiological normal aging processes.

Longevity Theory: The belief that life can be extended by manipulating cellular function and propagation through nutritional and lifestyle modification.

Lymph drainage: The removal of extracellular fluids, cellular toxins and waste products away from cells and into the lymphatic system. The lymphatic system directs lymph drainage to the bloodstream leading to the liver, kidneys and spleen where waste and toxins may be digested, metabolized and excreted out of the body.

mTor: Serine/threonine protein kinase that regulates cell growth, proliferation, motility, survival, protein synthesis, autophagy, transcription and plays a major role in cell longevity and anti-aging.

Magnesium: A mineral naturally found in whole foods. It is required for energy production, oxidative phosphorylation and glycolysis. It contributes to the structural development of bone and is required for the synthesis of DNA, RNA and the antioxidant/anti-toxin glutathione. Magnesium plays a role in the transportation of calcium and potassium ions across cell membranes. This process is important for nerve conduction, muscle contraction and normal heart rhythm. Magnesium has a relaxation effect on muscles and the mental state and is commonly used in baths in the form of Epsom salts, as well as in hospitals for calming contractions during premature labor and hypertensive pregnancy states.

Medi-spa: A combination of medical services and skin fitness programs for beauty. A gym for beauty.

Mitochondria: An organelle found in large numbers in most cells, in which the biochemical processes of cellular respiration and energy production occur. It has a double membrane; the inner membrane being folded inward to form layers. It is the power station of all cells. Early in evolution it was a foreign prokaryotic (bacteria) cell that found its way into larger cells that eventually became multi-cellular organisms, and to this day mitochondria still has its own set of DNA.

Modifilan: Dried brown seaweed extract known to remove heavy metals and radiation from the system. It is a natural anti-obesity sea ingredient.

Molecular damage: Damage to biomolecules such as DNA, cell membrane lipids, enzymes or structural proteins, often caused by free radicals that become overly abundant due to UV radiation, toxin exposure, infection or some other cellular stress. May lead to dysregulation of mTOR that can cause a gene expression of cancer within a cell.

NAD+: An essential biochemical in all cells that plays a key role in mitochondrial power. Aging and a sedentary lifestyle decrease NAD+, stunting cellular longevity and proliferation.

Neurotrophic: Of or relating to the growth and maintenance of nervous tissue.

Nootropic: A substance used to enhance memory or other cognitive functions. They are used to improve cognitive function, particularly executive functions, memory, creativity or motivation, in healthy individuals as well as those with neurological conditions.

Nutrition therapy: The intentional therapeutic use of nutrients to improve health and extend lifespan.

Ocean stewardship: The ethic of embodying responsible life practices and planned management of our ocean resources for future generations.

Oxidative stress: An imbalance between the production of free radicals and the ability of the body to counteract or detoxify their harmful effects through neutralization by antioxidants.

Peristaltic Action: Muscles that line your esophagus, stomach, small intestine and colon contract and relax in a rhythm that produces a wavelike motion. This movement, called peristalsis, pushes food through the length of your digestive tract. Any food you eat stimulates nerves, which trigger peristaltic action in the muscles.

Polysaccharides: The major component of seaweed extracts. Nutritional polysaccharides are common sources of energy and those from seaweed extracts are easily assimilated by human systems.

Potassium: An electrolyte that helps conduct electrical charges in the body. Like all the other electrolytes, our bodies have evolved elaborate systems to control blood levels in a narrow range. If potassium levels get too high or too low, the heart and nervous system do not function properly and can shut down completely.

SIRT: A protein known to play a key role in helping blood stem cells cope with aging. It has been verified that SIRT can reverse age-associated degeneration.

Sirtuins: a class of proteins that regulate important biological pathways in cells. They have been implicated in influencing a wide range of cellular processes like aging, transcription, apoptosis, inflammation and stress resistance, as well as energy efficiency and alertness during low-calorie situations. Sirtuins can also control circadian clocks and mitochondrial biogenesis.

Sodium: Major component of salt. Sodium is essential for life. Multiple mechanisms within the body tightly regulate the sodium and chloride concentrations. Daily minimum amount of sodium is required for survival. Too much sodium can bring on serious health implications such as high blood pressure.

Thalassophile: Someone who loves everything about the ocean and strives to be near the water on a daily basis.

Thalasso therapy: An ancient marine medical system and health living practice developed by French as a viable supplemental healthcare option.

WaTa: WaTa is an advanced technique of Watsu. WaTa moves the receiver above and below the water through a dance of body and water. The system mimics the feelings of being in a mother's womb

and is deeply effective for spinal injuries, MD, MS and other neuromuscular disorders.

Watsu: Aquatic bodywork used for deep relaxation and passive aqua therapy. Watsu is characterized as one-on-one session where the practitioner gently cradles, moves, stretches, and massages a receiver in chest-deep water. Originally developed by Harold Dull at Harbin Hot Springs, CA in the early 1980's.

Wildcrafting: Collecting food, medicine and body products from their natural environment.

Yoga: A 2000+ year old system to help practitioners understand how to maintain their own body.

Zinc: A critical mineral for human health. Zinc deficiencies play a major role in age-associated degenerative disorders such as suppressed immune systems and loss of eyesight

REFERENCES:

Aceves, C., A. B., & D. G. (2005). Is iodine a gatekeeper of the integrity of the mammary gland? *Journal of Mammary Gland Biology and Neoplasia*, 10(2), 189-196.

Adler, A. S., K. T., S. E., & C. H. (2007). Reversal of aging by NFkappaB blockade. *Cell Cycle*, 7(5), 556-559.

Alberts, B., J. A., L. J., et al. (2002). *Molecular Biology of the Cell* (4th ed.). New York, NY: Garland Science. Epidermis and Its Renewal by Stem Cells. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK26865/>.

American Medical Association. (1908). *JAMA: The Journal of the American Medical Association*. American Medical Association, 51(2).

American Medical Association. (1911). *JAMA: The Journal of the American Medical Association*. American Medical Association, 56.

Anderson, R., B. K., W. J., M. O., & S. D. (2003). Nicotinamide and PNC1 govern life-span extension by calorie restriction in *Saccharomyces cerevisiae*. *Nature*, 423, 181-185.

Boyle, M. A., & L. S. (2008). *Personal Nutrition* (7th ed.). Stamford, CT: Cengage Learning, pp. 11–12, ISBN 0-495-56008-1.

Cao, X., & D. J. (2001). Genomic profiling of short- and long-term calorie restriction effects in the liver of aging mice. *Proceedings of the National Academy of Sciences*, 98(19), 10630-10635.

Cartwright, M. (2013, May 2). "Roman Baths," *Ancient History Encyclopedia*. Retrieved from http://www.ancient.eu/Roman_Baths/.

Cerrada, A. (2013-2014). New approach to water treatments: hydrology, balneotherapy, and thalassotherapy the new health tourism. *The*

Journal of The Japanese Society of Balneology, Climatology and Physical Medicine, 77(5), 490-491.

Charlier, R. (1982). Thalassotherapy. *The Encyclopedia of Beaches and Coastal Environments*, 807(13).

Cusi, K. (1998). Metformin: a review of its metabolic effects. *Diabetes Reviews*, 6(2), 89-131.

Choe, S. S., H. J., H. I., K. J., & K. J. (2016). Adipose Tissue Remodeling: Its Role in Energy Metabolism and Metabolic Disorders. *Frontiers in Endocrinology*, 7, 30.

Damonte, E. B., M. M., & C. A. (2004). Sulfated seaweed polysaccharides as antiviral agents. *Current Medicinal Chemistry*, 11(18), 2399-2419.

Dearsley, B. (n.d.) 12 Top-Rated Tourist Attractions in Bath. *Planetware*. Retrieved from <http://www.planetware.com/tourist-attractions-/bath-eng-av-bath.htm>.

Dhahbi, J., Cao, S., Tillman, J., Mote, P., Madore, M., Walford, R., & Spindler, S. (2001). Chaperone-mediated regulation of hepatic protein secretion by caloric restriction. *Biochemical and Biophysical Research Communications*, 284(2), 335-339.

Dhahbi, J. M., & M. P. (1999). Calories and aging alter gene expression for gluconeogenic, glycolytic and nitrogen metabolizing enzymes. *American Journal of Physiology*, 277(2:1), E352-E360.

Dhahbi, J., M. P., C. S., & S. S., (2004). Hepatic gene expression profiling of streptozotocin-induced diabetes. *Diabetes Technology & Therapeutics*, 5(3), 411-420.

Euser, A. G., & C. M. (2009). Magnesium sulfate treatment for the prevention of eclampsia: A brief review. *Stroke; A Journal of Cerebral Circulation*, 40(4), 1169-1175.

Fain, J. (2010). Release of inflammatory mediators by human adipose tissue is enhanced in obesity and primarily by the nonfat cells: a review. *Mediators of Inflammation*, 2010, 513948.

Feldman, S. C., R. S., S. C., C. A., & D. E. (1999). Antiviral properties of Fucoidan fractions from *Leathesia difformis*. *Phytomedicine*, 6(5), 335-340.

Fischinger, A., Fischinger, D., Fischinger, J., & Škrobonja, A. (2008). 100th anniversary of the fourth International Congress of Thalassotherapy in Opatija. *Acta Medico-Historica Adriatica*, 6(2), 261-276.

Fontbonne, A., C. M. A., J.-V. I., B. J. M., A. P., I. F., . . . E. E. (1996). The effect of metformin on the metabolic abnormalities associated with upper body fat distribution. *Diabetes Care*, 19(9), 920-926.

Forsythe, P., & K. W. (2013). Voices from within: gut microbes and the CNS. *Cellular and Molecular Life Sciences*, 70, 55-69.

Fryer, L., & P.-P. A. (2002). The anti-diabetic drugs rosiglitazone and metformin stimulate AMP-activated protein kinase through distinct signaling pathways. *Journal of Biological Chemistry*, 277(28), 25226-25232.

Fulgencio, J. P., & K. C. (2001). Effect of metformin on fatty acids and glucose metabolism in freshly isolated hepatocytes and on specific gene expression in cultured hepatocytes. *Biochemical Pharmacology*, 62(4), 439-446.

Hardie, D. (2011). AMP-activated protein kinase-an energy sensor that regulates all aspects of cell function. *Genes & Development*, 25(18), 1895-1908.

Hocman, G. (1989). Prevention of cancer: vegetables and plants. *Comparative Biochemistry and Physiology Part B*, 92(2), 201-212.

Howitz, K. T., & B. K. (2003). Small molecule activators of sirtuins extend *Saccharomyces cerevisiae* lifespan. *Nature*, 425, 191-196.

International Society of Medical Hydrology and JAMA. (1911). *The Journal of the American Medical Association*, 56.

Johnson, N. (1990). Seaweed and its synthetic analogues in obstetrics and gynecology 450BC-1990AD. *Journal of the Royal Society of Medicine*, 83(6), 387-389.

Johnson, A. R., M. J., & M. L. (2012). The inflammation highway: metabolism accelerates inflammatory traffic in obesity. *Immunological reviews*, 249(1), 218-238.

Kim, S. (2014). Marine cosmeceuticals. *Journal of Cosmetic Dermatology*, 13(1), 56-67.

Kovacic, S., & S. C. (2004). Akt activity negatively regulates phosphorylation of AMPK in the heart. *Journal of Biological Chemistry*, 279(3), 2332.

Kredel, L. I., & S. B. (2014). Adipose-Tissue and Intestinal Inflammation – Visceral Obesity and Creeping Fat. *Frontiers in Immunology*, 5, 462.

Kushnir-Sukhov, N., et.al. (2006). 5-Hydroxytryptamine induces mast cell adhesion and migration. *Journal of Immunology*, 177, 6422-6432.

Langley, E., & P. M. (2002). Human SIR2 de-acetylates p53 and antagonizes PML/p53-induced cellular senescence. *EMBO Journal*, 21(10), 2383-2396.

Luo, J., & N. A. (2001). Negative control of p53 by Sir2alpha promotes cell survival under stress. *Cell*, 107(2), 137-148.

Mercer, B. M., & M. A. (2009). Society for Maternal Fetal Medicine. Magnesium sulfate for preterm labor and preterm birth. *Obstetrics & Gynecology*, 114(3), 650-668.

Millehan, J. (2013). What Are the Health Benefits of Swimming in Sea Water? *LIVE STRONG*. May 5, 2016, retrieved from <http://www.livestrong.com/article/400377-what-are-the-health-benefits-of-swimming-in-sea-water/>.

McGrouther, D., & A. F. (1998). A preliminary report: the changes in the neuropeptide containing epidermal innervation in response to inflammatory reactions elicited in human breast skin. *Journal of the Royal College of Surgeons of Edinburgh*, 43, 49-52.

Michan, S., & S. D. (2007). Sirtuins in mammals: insights into their biological function. *Biochemical Journal*, 404(1), 1-13.

Mobbs, C. V., B. G., A. R., B. A., F. C., M.-F. E., N. J. (2001). Neuroendocrine and pharmacological manipulations to assess how caloric restriction increases life span. *Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 56(1), 34-44.

Null, G. (1998). *The Clinician's Handbook of Natural Healing*. New York, NY: Kensington Press.

Pallas, M., V. E., T. M., G.-C. J., & C. A. (2008). Modulation of sirtuins: new targets for antiaging. *Recent Patents CNS Drug Discovery*, 3(1), 61-69.

Sakula, A. (1991). The History of the Royal Sea Bathing Hospital Margate 1791-1991. *Journal of the Royal Society of Medicine*, 84(10), 636.

Sandmeier, J. J., & C. I. (2002). Telomeric and rDNA silencing in *Saccharomyces cerevisiae* are dependent on a nuclear NAD⁺ salvage pathway. *Genetics*, 160(3), 877-889.

Schlossman, M. (2009). *The Chemistry and Manufacture of Cosmetics* (4th ed.). Carol Stream, IL: Allured Books.

Schulz, T. J., Z. K., V. A., U. N., B. M., & R. M. (2007). Glucose restriction extends *Caenorhabditis elegans* life span by inducing mitochondrial respiration and increasing oxidative stress. *Cell Metabolism*, 6(4), 280-293.

Seaweed. (2005). *Review of Natural Products*. St. Louis, MO: Facts and Comparisons, part of Wolters Kluwer Health.

She, Q. B., & M. W. (2003). Inhibition of cell transformation by resveratrol and its derivatives: differential effects and mechanisms involved. *Oncogene*, 22(14), 2143-2150.

Skibola, C. F. (2004). The effect of *Fucus vesiculosus*, an edible brown seaweed, upon menstrual cycle length and hormonal status in three pre-menopausal women: a case report. *BMC Complementary & Alternative Medicine*, 4, 10.

Spindler, S., D. S., M. P., K. P., & T. T. (2016). Rapid identification of candidate CR mimetics using microarrays. *SENS (Strategies for Engineered Negligible Senescence) Research Foundation*. Retrieved from <http://www.sens.org/outreach/conferences/rapid-identification-candidate-cr-mimetics-using-microarrays>.

Stanton, M. (1983). Sea Bathing at Margate. *History Today*, 33(7).

Stonehouse, W., C. C., P. J., et al. (2013). DHA supplementation improved both memory and reaction time in healthy young adults: a randomized controlled trial. *American Journal of Clinical Nutrition*, 97(5), 1134-1143.

Teas, J., B. M., C. D., D. J., S. A., & B. L. (2009). Could dietary seaweed reverse the metabolic syndrome? *Asia Pacific Journal of Clinical Nutrition*, 18(2), 145-154.

Teas, J., H. T., H. J., F. A., S. D., & K. M. (2009). Dietary seaweed modifies estrogen and phytoestrogen metabolism in healthy postmenopausal women. *Journal of Nutrition*, 139(5), 939-944.

Thompson, K., & D. C. (2004). Antiviral activity of *Undaria pinnatifida* against herpes simplex virus. *Phytotherapy Research*, 18(7), 551-555.

Trueman, C. N. (2016, August 16). Roman Baths. *The History Learning Site*. Retrieved from historylearningsite.co.uk.

Tucci, P. (2012). Caloric restriction: is mammalian life extension linked to p53 aging. *Aging*, 4(8), 525-534. Retrieved from <http://www.agingus.com/article/MPvyx93cEzwzFbnnd/text#fulltext>.

Walford, R., Harris, S. B., & Gunion, M. W. (1993). The calorically-restricted, low fat nutrient-rich diet in Biosphere-2 significantly lowers blood glucose, total leukocyte count, cholesterol and blood pressure in humans. *Proceedings of the National Academy of Sciences*, 89(23), 11533-11537.

W, D. (2000). Metformin: the weight-loss drug. *IAS Bulletin*, 4(5), 3-5.

Willcox, B. J., W. D., T. H., F. A., Y. K., H. Q., . . . S. M. (2007). Caloric restriction, the traditional Okinawan diet, and healthy aging: the diet of the world's longest-lived people and its potential impact on morbidity and lifespan. *Annals of the New York Academy of Sciences*, 1114, 434-455.

Yamori, Y., M. A., & T. K. (2001). Implications from and for food cultures for cardiovascular diseases: Japanese food, particularly Okinawan diets. *Asia Pacific Journal of Clinical Nutrition*, 10(2), 144-145.

Zhou, G., & M. R. (2002). Role of AMP-activated protein kinase in mechanism of metformin action. *Journal of Clinical Investigation*, 108(8), 1105-1107.

(2009). Convalescent Home. *Historic Hospital Admissions Records Project*. Retrieved from <http://hharp.org/library/gosh/general/convalescent-homes.html>.

ABOUT THE AUTHOR

Antoinette Marie Marquez

To participate in healing is to have faith in the future. Healing makes you a time traveler and suddenly nature matters.



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Antoinette M. Marquez is an American Certified thalasso therapist. Her book, thalasso systems and her products were developed out of her love for helping others take healing home. Together Antoinette and Daniel Marquez run Pharmedsea, a 25-acre sea farm on the coast of California in

Antoinette hopes to create an American thalasso therapy culture and build aquaculture awareness as a way to mitigate the harm caused to people and our planet. Restore, renew and revive can become the new mantra for people and planet when we look to the ocean as a human life support system. Antoinette and Daniel believe that we can all turn to the seas to create a blue/green economy where we put the planet first. Their brands were created to merge healthy people living on a healthy planet

“A Longevity Revolution” was written as part of an educational system that aims to reveal a new way to look to the seas to save beauty and preserve youth while supporting our largest natural wonder. Putting the planet first and revealing the power of sea products can become a simple solution to all that ails people and planet.

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