# Evolutionary Development of Our Internal Ocean:

## Restoring Bio-Terrain with Quinton Marine Plasma

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In July of 2006, I published Part I entitled: "Bio-Terrain, Evolutionary Biology, and the Practice of Medicine in the Early 1900's: An Intro to René Quinton's Marine Plasma", where I introduced Quinton Marine Plasma as a fundamental tool in restoring biological terrain.<sup>1</sup>

In Part II, Raul Brugioni and I will explore the role the oceans and more specifically marine plasma plays in supporting and evolving life on our planet. In addition, we will define how Quinton Marine Plasma restores biological terrain and provide clinical distinctions to better understand how and when to apply Quinton.

#### What Is Quinton™ Marine Plasma™?

In the overwhelming response to June's article, we have heard many speculations regarding what marine plasma *is*. Let me just begin by saying what marine plasma is *not*.

First, Quinton is not merely seawater. You cannot simply collect and purify deep or coastal seawater and expect to duplicate the clinical results realized by Quinton Marine Plasma. Second, Quinton is not plankton, and does not contain plankton. Since Quinton is cold-filtered, all zooplankton and plankton are removed from the fluid.

Quinton Marine Plasma is the living fluid produced by dense fields of zoo-plankton as they consume smaller phyto-plankton. This fluid, discovered by French physiologist René Quinton, has been used successfully by clinicians throughout the world for over 100 years to restore our 'internal milieu' to its original marine inheritance.

Quinton is not *just* trace minerals. Trace minerals produced from salt beds on land are *inorganic*, because they have not been pre-digested by living microorganisms. In addition, the quantity of each trace mineral

varies from sample to sample and does not mirror the ratios found in the human body. It is true that unlike land minerals, every major and trace mineral is present in Quinton in an ideal synergistic ratio, but Quinton is still much more.

Quinton Laboratoires was founded in 1905. In France, Quinton Marine Plasma was officially recognized as a medicine around 1907. In 1941, Quinton Isotonic, and Hypertonic products were 'registered' as medicines and included in France's equivalent of the *Physician's Desk Reference* (*Dictionnaire Vidal*). Quinton products remained listed in the *Vidal* until 1999, referencing oral and topical applications.

Today, forward-thinking scientists are beginning to understand what Quinton knew 100 years ago; that marine plasma has the power to regulate our own "internal ocean" as it informs our genetic potential and guides our very evolution.

#### Quinton's Laws of Osmosis & Marine Constancy

The first animals evolved in sea water. As animals evolved, they developed a symbiotic strategy to ensure their survival. Their adaptation to life on land was a foundational evolutionary achievement, which required profound biological advancements – with the most critical factors of success being the ability to maintain a constant pH, mineral makeup, and temperature.

The more we study the ocean, the more we understand its fundamental role in guiding our evolution. In 1904, René Quinton asserted his foundational laws of osmosis and marine constancy - the idea that the earth's oceans maintain a state of elemental equilibrium, known as "marine constancy." He then demonstrated through years of research that our internal fluids obey the same laws.<sup>12</sup>

<sup>&</sup>lt;sup>1</sup>Dittman, R. "Bio-Terrain, Evolutionary Biology, and the Practice of Medicine in the Early 1900's: An Intro to René Quinton's Marine Plasma." Explore, 2006. <sup>12</sup>Quinton, René: *L'eau de Mer Milieu Organique*, 1904. <sup>2</sup>Capra, Frank. *Hemo The Magnificent*. DVD. 1956.

His laws can be summed up best in his profound revelation: "We are truly a living marine aquarium!" The 1957 award winning movie, *Hemo the Magnificent*, produced and directed by Frank Capra, reaches the same conclusion, powerfully asserting that "blood is seawater."

According to Quinton's laws of osmosis and marine constancy, he asserted the following:

- 1. All life emerged from unicellular organisms the ancestors of human cells. Their need for a constant supply of mineral salts was met by the seawater in which they lived. The seawater also facilitated acid-alkaline balance, which was fundamental to the establishment of homeostasis.
- Humans maintain an isotonic internal environment similar to the less salty oceans which existed when the first amphibians emerged hundreds of millions of years ago.
- "There is physical and physiological identity between seawater and the internal environment of the organism."

# Our "Internal Ocean" Informs Our Genetic Expression

If Quinton's laws are true, how do they apply to us? Even from the very beginning, the vitality of our internal ocean guides our individual gestational evolution. Before the neural tube forms in an embryo, the internal ocean or "tidal body," which develops from the amniotic fluid, intelligently regulates and directs the formation of the nervous system and organs.

Additionally, the organic minerals saturated within the tidal body provides a conductive medium that transmits phasic and sound pulses received from the mother's abdominal aorta that in turn develops the vestibular area of the embryonic brain. Later, these tidal "pulses" are sensed by the fetus' skin, which in turn stimulates neuronal development. Indeed, as we are developing, the health of our "tidal body" directs how our genetic potential is realized.<sup>3</sup>

Like the tidal body and the internal milieu, Quinton Marine Plasma's rich store of organic minerals facilitates cellular conductivity by restoring the electrical potential of our cells. When we are born, our internal ocean feeds every single one of our billions of cells. This extra-cellular fluid is where all inter-cellular communication takes place and where critical nutrients are transported to the cell membrane.

So, while every cell contains its own genetic backbone, it is constantly being affected by the epigenetic influencers found within the extra-cellular fluid. Studies reveal that changes in our extra-cellular fluid have the ability to direct the cell to make 2,000 or more different proteins from the same gene blueprint.<sup>4</sup> The upshot of this dynamic is that, while genetic makeup is important to the health and function of each cell, "a cell's operations are molded by their interaction with the environment, not by its genetic code."<sup>4</sup>

The oceans contain the homeostatic blueprint of life – the original genetic code that has and is governing evolution. The mineral, nutritional, and genetic information found in marine plasma may "recharge" the extra-cellular fluid, enhancing cellular communication.

World famous biologist Craig Venter, the first to map the human genome, is now working on a new project to uncover the genetic origins of the human genome and all life on the planet to better understand how the oceans impact health. To accomplish this, he is cataloguing ocean water samples every 200 miles.

His team now estimates that there may be as many as 20 billion genes within the Earth's oceans – a rich store of genetic information that tells the story of our oceanic origins. Through natural selection, humans inherited a mere 30,000 genes, of which as many as 18,000 have been labeled as "pseudogenes" or "junk genes," Until recently scientists have considered pseudogenes to be merely obsolete remnants of our evolutionary past.

Today biologists assert that the junk genes may "inform" the genes next to them and may fulfill an immunological role in protecting us from both internal and external environmental stress. Our 30,000 genes interact with our internal ocean to respond to the billions of genes present in our environment.

It is likely that the "junk" genes help us to adapt to rapidly changing environmental circumstances - to upgrade our bodies' genetic hardware as we move through an evolutionary maze. By drinking marine plasma, we may be accelerating this upgrade by exposing our bodies to a micro-dilution of the genetic and epigenetic information stored in the billions of genes and millions of life forms found in the dense plankton bloom.

# Our Land-Locked Bodies Suffer From Chronic Cumulative Mineral Deficiencies

Since all life originated within the ocean, our internal biology depends upon the complete ratio of mineral salts found within the oceans. However, living off of the land no longer provides the raw material needed to maintain our internal ocean. Our land-locked bodies are nutritionally starved.

We overeat in a futile attempt to restore this fundamental "organic" mineral balance. The soil we use to grow the foods we eat and therefore the nutritional supplements we consume are devoid of the full spectrum

<sup>&</sup>lt;sup>3</sup> Blum, T., Dittman, R. *Prenatal, Perception, Learning, and Bonding.* Leonardo Publishers. 1993. <sup>4</sup> Lipton, Bruce. 2005. <sup>5</sup> "Voyage of the Sorcerer: J. Craig Venter cracked the human genome. Now he's set his sights on a new frontier: life under the sea" *On Earth* Magazine; Summer 2006, p. 8-9. <sup>6</sup> Gerstein, Mark; Zheng, Deyou. "The Real Life of Pseudogenes." Scientific American. August 2006.

of trace minerals we crave. As the former Minister of Agriculture Dr. André Voisin pointed out, most cancers are linked to a lack of key nutrients. Clearly, re-establishing mineral balance is one of the foundational requirements to restoring the biological terrain.

The health implications of soil depletion were forecasted in 1936, when the United States Senate issued Document 264, warning that our crops were being grown on mineral depleted soil and that human health was suffering as a result. The following is an excerpt from the report:

"Sick soils mean sick plants, sick animals, and sick people. Physical, mental and moral fitness depends largely upon an ample supply and a proper proportion of minerals in our foods. Nerve function, nerve stability and nerve cell-building likewise depend upon trace minerals." 8

Over time, mineral deficiencies can lead to chronic acidification, which in turn sets in motion a positive feedback loop, defined by the cumulative depletion of vital minerals from the body and therefore further acidification, which weakens our cellular defenses.<sup>9</sup>

Trace minerals account for approximately three (3) percent of the electrolytes in the ocean and our internal environment, where they form a complex interdependent synergy. One billionth of a gram (nanogram) of metal contains 2.5 billion atoms. One to ten atoms are all that is needed to activate an enzyme. Therefore, even a minute but consistent supply of organic "live" trace minerals has the ability to restore the balance lost from nutrient deficient foods.

#### **Plankton Convert Minerals to Bioactive State**

Microbes feed on inorganic minerals and convert them to their 'organic' crystalloid state. Marine plasma contains a full spectrum of organic crystalloid minerals, transformed by the trillions of plankton and zooplankton (i.e. microorganisms) found within the vortex plankton bloom in which marine plasma is produced.

Inorganic minerals are not available at a cellular level and must be transformed into their crystalloid state in order to pass through the cell membrane, and therefore to direct cellular activities. Crystalloid minerals are bioavailable at the epigenetic level both outside and inside the cell – interacting with the cell membrane to direct genetic potential.

"People can utilize inorganic salts or elements only by having plant life in their intestines in the form of bacteria to hook up the inorganic element with a carbon atom so it can be transformed into an organic form." <sup>10</sup> Unfortunately, with the advent of antibiotics and the proliferation of Candida, the intestinal flora's ability to convert inorganic elements into their organic state has been significantly compromised.

The synergistic matrix of crystalloid minerals found within the extra-cellular fluids plays an integral role in determining the health of the biological terrain and therefore the health of the person. And, the quality of the minerals and water found within the extra-cellular fluid determines the quality of the communications that take place between cells.

In 1994, Pischinger, Chair of Histology and Embryology at the University of Vienna showed that cells are not in direct contact with each other, and that all inter-cellular information (nervous stimuli, metabolic, immunological and vascular processes, etc) flows through the extra cellular liquid. Pischinger asserted that: "Original seawater is the oldest system of communication between living cells."

Does it not stand to reason, then, that the best way to re-mineralize the all-important extra-cellular fluid is by replenishing it with its original marine inheritance?

### Quinton Marine Plasma Is Beneficial In Its "Live" State "The Whole is Not Equal to the Sum of It's Parts"—Goethe

Through his research, René Quinton showed that: 1. marine plasma could not be extracted from random locations; 2. that marine plasma was clinically superior to seawater; and 3. that marine plasma must be kept "alive" in the seawater base in which it is dissolved.

In his landmark book, "L'eau de Mer Milieu Organique" (Seawater, Organic Matrix), René Quinton demonstrated that drying out or desiccating marine plasma irreversibly damaged the "live" mineral and protein complexes. He clinically demonstrated that it was impossible to reconstitute marine plasma and still achieve the same health benefits. <sup>12</sup> This is because, when marine plasma is dried, minerals fall out of their "live" crystalloid state.

Water is the universal molecular and energetic solvent. It does not "forget" the information that dissolves in it. The minerals, organic compounds, and genetic material stored in the marine plasma form a matrix of biological information that may intelligently evolve us. <sup>13</sup>

René Quinton himself summarized it best when he asserted that: "marine plasma tends to maintain its characteristic biological activity and the molecular balance of a living medium. The entirety of trace elements contained in marine plasma are to be found in the solution in their active states." <sup>12</sup>Unfortunately, eating dried sea salt provides a potent inorganic trace mineral complex, but fails to provide the biological information stored within marine plasma.

<sup>&</sup>lt;sup>7</sup> Voisin, André. *Soil, Grass, and Cancer.* <sup>8</sup> United States Senate issued Document 264, 1936. <sup>9</sup> Passebecq, André M.D., Ph.D., N.D., Soulier, Jean-Marc Soulier, Ph.D.: "Human Plasma and Ocean Plasma: A Comparative Study of the Therapeutic Properties of Seawater Preparations" *1992.* <sup>10</sup> Murray, Maynard. *Sea Energy Agriculture.* 1976. <sup>11</sup> Pischinger, A. "Basal regulation system," Ed. Haug 1994. <sup>12</sup> Quinton, René: *L'eau de Mer Milieu Organique*, 1904. <sup>13</sup> Dang Vinh Luu and Claudine Luu. "Connaissance de l'eau". University of Montpellier. INDERPLAM 1993.

#### **Ouinton Restores Bio-Terrain**

Maintaining an optimal internal environment or biological terrain, is critical to maintaining health. "To maintain a healthy body, homeostasis must be kept constant. A healthy organic terrain is the basis of health and conversely diseases develop on a depleted or congested terrain. Upstream of most diseases there is an unbalanced terrain."

Targeted nutrients cannot fulfill their intended function on top of a depleted biological terrain. Quinton Marine Plasma directly and indirectly resolves many of the polarities listed below by replenishing the integrity of the "internal ocean."

# Bio-Terrain Clinicians Are Looking to Restore Balance to the Following:

<b>─</b>
Acid
Sympathetic
Anabolic
Yang
Excess
Material
External (Physical)
Oxidation

Whenever there is a chronic deficiency or excess of any critical nutrient, pathology is not far behind. Clinicians struggle to reconcile the fact that one nutritional supplement may balance out one polarity while negatively affecting another. For example, if a person takes B vitamins, they may be balancing out a deficiency, while at the same time the B vitamins may contribute to chronic acidity and dehydration through the generation of Excess Heat.

This is the "law of diminishing returns", whereby the amount of energy it takes to absorb, assimilate, and eliminate a nutritional product is often greater than the energy gained by the product itself. The majority of most nutritional supplements are poorly absorbed, leaving the intestines, liver, and kidneys to eliminate the unassimilated portions, which further dehydrates and acidifies the body.

Quinton marine plasma, however, is taken up by the intestines through passive diffusion. Since the organic minerals and marine co-factors have been 'pre-digested' by the zoo-plankton, they do not require active digestion as a pre-requisite for assimilation.

#### The Future of Evolution

We are now beginning to understand the conditions for evolving and optimizing our health. In the past, the whole area of reproduction was a mysterious event often attributed to chance. Our impression was that at the time of birth, we were thrown into a hostile, threatening world and forced to learn to *survive*. Survival gave rise to an accidental form of evolution.

With Quinton, we have the tools to replenish and restore our bio-terrain – to *thrive* in our internal environment. Thriving is giving rise to a new kind of *evolution*. Now, we can direct, balance, and enhance our internal environment.

We assert that Quinton has a key role to play in the coming biotech age, by creating a homeostatic foundation that helps to guide, balance, and regulate the many nutraceuticals, pharmaceuticals, and stimulants we consume to manipulate our physiology.

In our opinion, Quinton is an essential tool for clinician's protocols, simply because it is so effective at restoring bio-terrain, which is primary to resolving secondary more immediate physiological objectives and symptoms.

The big revelation for us was that through the consistent application of Quinton marine plasma, many of the symptoms and complaints begin to resolve, simplifying patient evaluations, and thereby uncovering subtler conditions specific to the individual. Once the root causes begin to reveal themselves to the clinician, the clinician is able to competently address the personal imbalance using targeted therapies, nutraceuticals, and bioenergetic products, to arrive at optimal health.

#### Ouinton™ - Distinctions for Clinical Use\*

Quinton Marine Plasma is manufactured in two distinct forms: 1. as an isotonic solution that is precisely diluted to match the 0.9% salinity of human blood plasma; and 2. as a hypertonic solution that is undiluted at 3.3% salinity. While dosage is important, the clinical goal should be to encourage consistency. In general, Isotonic's overall effect is gentler than Hypertonic and is therefore better suited for sensitive clients. The following summarizes how Quinton Isotonic and Hypertonic work in the body according to various clinical perspectives. <sup>14</sup>

#### Naturopathic and Biological Terrain Distinctions

- ♦ Balances out internal fluids.
- ♦ Facilitates intestinal peristalsis, thereby addressing constipation.
- Clears toxins and removes Excessive Heat; supports deficient adrenal, pituitary, thyroid, and gonadal function.
- ♦ Ideal for supporting recovery from fatigue, low energy, and other depressive states.
- Promotes organic physiological growth & development.

<sup>&</sup>lt;sup>9</sup> Passebecq, André M.D., Ph.D., N.D., Soulier, Jean-Marc Soulier, Ph.D.: "Human Plasma and Ocean Plasma: A Comparative Study of the Therapeutic Properties of Seawater Preparations" 1992. 14 Mahé, André, Brugioni, R. O Segredo das Nossas Origens O Plasma de Quinton.

- Assists the body in reducing inflammation and supports the body's ability to eliminate infections and parasites.
- Restores and opens up suppressed methylation and metabolic pathways in the brain and nervous system.
- Improves general intra-cellular and extra-cellular communication and restores membrane potential.
- ♦ Enhances pro-biotic activity, which promotes the proliferation of pro-biotic microorganisms.
- Restores Triple-Warmer/Pericardium function (thyroid function and peripheral circulation/cold hands and feet).
- Restores mineral balance thrown off by excessive sweating, exertion, diarrhea and coffee intake.
- Improves absorption of other nutrients.

### Osteopathic Benefits

- Resets/restores the 'tidal body' to fewer pulses/min.
- Supports the intended outcome of manipulation therapy, supporting the subtle, physical, and emotional "bodies".

#### **Oriental Medical Distinctions**

- Promotes the Flow and Conductivity of Chi and Blood.
- Reduces thick, greasy tongue coating.
- Reduces Heat and Dampness.
- Restores Jing Essence.
- ♦ Restores Kidney Yang and Kidney Yin.
- ♦ Reduces the Accumulation of Phlegm & Mucus in the Metal Element (lung & large intestine).
- Promotes Earth Element Function/Digestion (Stomach/Spleen/Pancreatic) by increasing digestive enzyme production.
- ♦ Tonifies Spleen.
- Reduces Toxic Heat and Fire from the skin (topical and internal administration).
- Eliminates Dampness and Heat from the Large Intestine.

#### **General Guidelines & Benefits**

- Balances skin conditions, digestive issues, and facilitates mental focus.
- ♦ Supports the restoration of balanced internal pH.
- ♦ Supports optimal immune function.
- In certain circumstances, slightly and temporarily elevates basal temperature.

#### Ouinton™ Isotonic\*

#### **General Guidelines & Benefits:**

Recommended for children, elderly patients, people with a fragile immune system, and hypersensitive/ allergic patients. Isotonic is generally used to address nervous or anxious states. It supports the reduction of hypersensitivities to foods and other allergens.

#### **Physiological Distinctions:**

For issues related to sympathetic dominance and fast oxidation.

#### **Oriental Medical Distinctions:**

Yin, Cooling, Sedating, Balancing. Calms the Shen/Spirit. Reduces Heart Fire.

#### **Ayurvedic Distinctions:**

Has a "moon" or calming quality.

#### **Additional Distinctions for Use:**

Excellent for yoga, meditation, sleep, and recovery after exercise.

#### Quinton™ Hypertonic\*

#### General Guidelines & Benefits:

Anabolic effect on metabolism. Improves endurance and strength. Excellent for high performance, and intense mental activity.

### Physiological Distinctions:

For conditions related to parasympathetic dominance and slow oxidation.

#### **Oriental Medical Distinctions:**

Yang, Warming, Energizing, Replenishing, Building, Tonifying. Ideal for Menopausal Yin Deficiency. Restores reproductive drive and Chi.

#### **Ayurvedic Distinctions:**

Has a "sun" or activating quality.

\*These statements have not been evaluated by the Food and Drug Administration. This product is not meant to diagnose, treat, cure, or prevent any disease or condition.

**Authors' Note:** Roy Dittman, OMD and Raul Brugioni, Biologist, may be reached by calling 949.302.9007 or by emailing them at *doctor@dittman.us*. Quinton Marine Plasma is exclusively distributed through health professionals. Quinton<sup>TM</sup> is a registered trademark of the manufacturer, Quinton Laboratorios, Spain. Marine Plasma<sup>TM</sup> is a registered trademark of Original Quinton. All rights reserved.