

How Seawater Can Help Us Heal Complex Health Conditions

Addressing a Blind Spot of Contemporary Western Medicine

INTRODUCTION

One of the most overlooked, yet demonstrably effective, health and healing paradigms in western medicine is the Marine Therapeutic Method established by the biologist Rene Quinton (1866-1925) and Dr. Jean Jarricot (1877-1962) in the early 1900s.

To help understand how such a significant and timeless contribution became lost in history, one need only turn to the more familiar, similar story of Nikola Tesla. His name and immense body of inventions were relegated to the background of science, an obscurity continues to this day. However, people now are trying to properly attribute our understanding of electricity and advances in electrical power systems that have been based on his work. Interestingly, the core scientific developments of both Tesla and Quinton occurred during the same period of time – the first quarter of the 20th century. The failure of history to recognize and apply their genius is a loss from which science and culture are now trying to recover.. Quinton’s insights are based on broad understanding of the evolution of life on Earth and the importance of the Ocean in these long-timescale geological and biological developments.

BACKGROUND: PRIMORDIAL SEAWATER, THE MEDIUM OF LIFE

About 5 billion years ago (5 BYA), planet Earth began forming through the gravitational accumulation of interplanetary dust and rock. One-half billion years later, the young cooling Earth was bombarded by comets and asteroids of ice, eventually covering the planet with water. The submerged crust of the Earth, containing more than 80 elements in the Periodic Table, gradually dissolved to their precise chemical constituents, creating the Primordial Ocean (aka Primordial Seawater or Primordial Soup).

Soon after, the Primordial Ocean spontaneously gave rise to cellular life, which exclusively evolved within the salty medium for the next 3 billion years. Islands and continents gradually emerged from beneath the ocean about 2.5 BYA. Much later, 500 million years ago, select multicellular life took an anomalous leap to explore a terrestrial existence.

DISCOVERY: THE TERRESTRIAL LEAP

Rene Quinton proposed that the marine nature of life required that species attempting terrestrial existence needed to “internalize” the ocean milieu that had

sustained them: “The only way cellular life could leave the ocean was to take the ocean with it.” Thus the blood and body fluids of *early* terrestrial life were strikingly similar to seawater, essentially a solution of the Periodic Table. Rachel Carson, the marine biologist renowned for her works *Silent Spring* and *The Sea Around Us*, has also articulated this premise:

Fish, amphibian and reptile, warm-blooded bird and mammal – each of us carries in our veins a salty stream in which the elements are combined in almost the same proportions as in seawater. This is our inheritance from the day, untold millions of years ago, when a remote ancestor, having progressed from the one-celled to the many-celled stage, first developed a circulatory system in which the fluid was merely the water of the sea.

Another renowned scientist, Alfred Pischinger, further explained this phenomenon in terms of systems dynamics:

A highly specialized cell could only arise (and survive) in the primordial seas that fed and protected it. Nothing about this has changed to this day, except that we now carry the primordial sea around within us. Then as now, the composition of this primordial sea had to be held constant, although this is much more difficult today. To accomplish this, the organism has had to create many regulatory mechanisms, and one of its primary tasks is to maintain a steady situation despite being an open system. Therefore, any fluctuation in the composition of the basal substance will be reported immediately to the accompanying organ cells, leading to changes there.

In *Essential Medical Physiology*, Stanley Schultz situated this view in practical terms:

There is good evidence that our predecessors migrated from the seas. During that migration, which lasted some 200 million years, they “locked” within themselves a fluid similar in composition to that of the seas from which they emerged. But perhaps the greatest lasting contribution was the notion that all physiologic processes are designed to maintain the internal environment, *the milieu interieur*, that bathes our cells, tissues and organs.

Ashmead and Graff, in *Intestinal Absorption of Metal Ions and Chelates*, point out that important effects can result from merely subtle differences in chemical composition: Although the essential microminerals consist of only a small fraction of the total body weight compared to the macrominerals, their value in aiding to extract energy, in growth and maintenance of the body tissue, and in assisting in the regulation of body processes cannot be overemphasized. Widdowson and Dickerson have written that “even a small departure from “normal” in the mineral composition of the *milieu interieur* (the environment in which cells live) may have profound physiological consequences, but may make no appreciable difference to the composition of the body as a whole.

In *The Wisdom of the Body*, physiologist and Nobel laureate Walter Cannon declares, “The internal environment is then the primordial physiological basis of the organism – its liquid matrix.”

DISCOVERY: “THE TERRAIN IS EVERYTHING”

Most of Rene Quinton’s intellectual influence spanned the period of the greatest physiologists of all time. His contemporary, Claude Bernard (called the father of

modern physiology), asserted in *The Terrain is Everything* that the *Milieu Interieur* (the Internal Terrain) is a physical reality and it is responsible for preserving the liquid primordial marine basis of the organism:

Within the organism, cells behave like small aquatic creatures, submerged in a warm and dark environment...Cells form societies we call tissues and organs... The structure and function of cells are determined by the physical, chemical and electrical properties of the liquid surrounding them...One cannot conceive of the existence of the tissues without the existence of a liquid environment...

The growing awareness of this revolutionary basis of physiology led to further revealing discoveries by Antoine Bechamp. However, the science was interrupted by what became the greatest debate in medical history¹. This is when “modern medicine” became derailed by the Germ Theory of Louis Pasteur² and his influential colleagues in the late 1800s. In its simplest form, the early Germ Theory proposes that disease and illness result from microbes we encounter in the environment. The medical community identified these microbes and developed exclusive medicines to kill them off. This concept became ingrained into medical research and treatment, and persists to this day. A current outcome is that physicians dealing with auto-immune and degenerative diseases may assume primarily a pharmaceutical approach..

Dr. Stefan Kuprowsky has provided this perspective of the milieu / terrain / matrix as it pertains to modern medicine. The matrix:

- provides nutrition to the cells;
- removes wastes from the cells;
- regulates the internal environment of cells through water balance, oxygenation, acid-base balance and mineral electrolytes;
- supports cellular defense through free-radical scavenging;
- maintains communication via the immune and endocrine systems and the autonomic nerve fibers; and
- forms an energetic communication system via subtle electrical currents and ionic gradients (which is also known in acupuncture as the meridian system).

Kuprowsky believes the matrix to be responsible for all the basic functions of the body, so that health, disease, and healing all begin in the matrix.

RENE QUINTON'S HYPOTHESIS: MARINE INHERITANCE

In his time, Rene Quinton commanded a unique biological vantage point of his time. A student of Darwin's theories concerning the marine origin of cellular life and an avid researcher exploring the fluids of the body, he concluded that the vital liquid matrix, which comprises 60-70% of body weight and nourishes and regulates physiological systems, evolved directly from seawater. In 1904, he explained the groundbreaking research and discovery in his monumental treatise, *L'eau du Mer, Milieu Organique (Seawater, the Organic Milieu)*. Quinton further proposed that any departure of the milieu from its original marine “inheritance” leads to a degeneration of cellular metabolism and loss of the organism's regulatory defense.

Successors of Benard, Bechamp and Quinton became advocates of the Marine Terrain perspective: Alexis Carrel, who won the Nobel Prize in Neurophysiology or Medicine; Walter Cannon, who wrote *The Wisdom of the Body*; Alexander Bogomoletz, author of *Cytotoxic Serum*; Jean Jarricot, who wrote *Marine Method*; Alfred Pischinger, author of *Basic Regulation System*; and others.

Scientifically and clinically "seawater" in its isotonic form is the vital liquid for the development of life. Its elemental ionic content is identical to the primordial "internal terrain" that it intervenes in the regulation of all physiological systems." – *Masson Medical Dictionary*

Quinton carried out a famous series of canine experiments at the Department of Pathological Physiology at the College de France. He based these experiments on the theoretical conclusions that animal fluids and blood evolved from seawater and that this identity has persisted throughout evolution. Acting on this hypothesis, Quinton transfused the whole blood of animals with a simple isotonic dilution of specially harvested and prepared seawater, referred to as *Plasma de Quinton*. The animals' system were able to recover the blood mass. Quinton also consistently observed and recorded a fast recovery of the analytical parameters and often-improved vitality of the animals.

DEVELOPMENT OF A NEW MEDICAL PARADIGM: 1908 to 1922

Evidence of the marine origin and identity of the fluid terrain represented a milestone in biology and physiology, but Quinton could not have expected what was soon to become his legacy. His discovery enabled Europe and the Middle East to survive multiple disease epidemics and ailments of the early 1900s, including cholera, tuberculosis, typhoid, syphilis, gastroenteritis, malnutrition, infertility, and birth defects.

After several quick and spectacular patient recoveries attributed to treatment with Plasma de Quinton, the French physiologist Dr. Jean Jarricot proceeded with the idea that Quinton's prepared isotonic seawater restores an imbalanced and impoverished cellular environment to its original marine origins, so that the system can achieve homeostasis. Jarricot led the establishment of 69 clinics throughout Europe and the Middle East, to serve the suffering regional populations. These clinics, known as *Le Dispensaire Marin*, were in use from 1908 to 1922, serving hundreds of thousands of patients from a variety of diseases and adverse health conditions. Plasma de Quinton also served the medical wards of WWI and WWII as a widely used blood plasma replacement.

Plasma de Quinton was administered using a variety of modalities:

- orally (nutritional, nutraceutical, preconception, prenatal);
- subcutaneous injection;
- intramuscular injection;
- intravenous injection;
- IV (250cc to 1 liter);
- mesotherapy;
- percutaneous hydrotomy (spinal disc therapy);

- hygiene (nasal, dermal, ocular, vaginal);
- colonic hydrotherapy and implant; and
- dental, oral (infection and inflammatory).

A NEW 20TH CENTURY NUTRACEUTICAL MEDICINE: 1934 to 1999

The reputation of Plasma de Quinton in medical and nutritional applications established it as one of the respected pharmaceutical medicines and it was entered into the French VIDAL Physician's Desk Reference (PDR) of 1934.

By the mid-1970s, Plasma de Quinton was used not only in medical clinics and hospitals, but its prescription use cost was reimbursed to all the citizens of France under their national health care system. In 1983, however, a major revision to the European Pharmacopeia established new standards requiring injectable medical products to be heat sterilized. This presented a serious violation of Quinton's hallowed protocols. Elevated heating of Plasma de Quinton would destroy its delicate biochemistry and compromise its therapeutic efficacy.

This regulation had serious consequences for Laboratoires Quinton and the use of its products, which lasted until 1999 when the company remarketed Plasma de Quinton as a dietary supplement.