The Physiological Effect of MRET Activated Water

Abstract

This particular article relates to a fundamental nature on how MRET Activated water with the modified molecular structure, physical and electrodynamic characteristics may enhance specific molecular mechanisms in living cells. The anomalous proton activity, electrodynamic characteristics and viscosity of MRET Activated water provide some evidence regarding its possible effect on electrical activity and proper function of the cells. Most cells and tissues have electrical properties relevant to their natural function. The living cells and tissues have rather complex structure, consisting of the folding membranes, the specialized connections, and organelles. The localization of electrical properties is particularly important, since each of the complex structures must be expected to have a specific role in the electrical function of the tissue. MRET Activated water with modified proton activity and electrical conductivity can also have ability to enhance a proton pump activity of the cells. As a result it may lead to the restoration of the transduction signaling and the restoration of normal cellular functions. The clinical observation proves the validity of the proposed hyposisis.

MRET Activated Water is produced with the help of patented (US Patent No. 6,022,479), non-chemical Molecular Resonance Effect Technology (MRET) method. The process of water activation induces the formation of water molecular clusters similar to water molecular structures found in living cells. The mechanism that explains the effect of electromagnetic fields on water is related to the existence of defects in molecular structure of water. The stable structural changes in water were detected in experiments by the UV luminescence spectrophotometer. They have been attributed to different water structural defects that include specific centers of luminescence. The nuclear proton spins were considered to be a primary targets of external magnetic fields, since proton lattice of water molecules is unstable and asymmetric. The structural metastability of water was associated with microscopic orbital currents of protons in water-molecular hexagons, and deviation from the stochiometric composition of water. The effects of memory of water interacting with electromagnetic fields were supposed to originate from the oscillations of water-molecular hexagons.

The basic idea of Molecular Resonance Effect Technology is the direct transmission of prerecorded molecular activity signals to biological systems with the help of Activated Water. These messages are imprinted in water during the process of activation. The effect of MRET Activated Water on molecular complexes, such as abnormal cells, can be explained by the fundamental physical phenomenon of electromagnetism, such as resonance, constructive and destructive interference. Modern research in biophysics proved that even slight change in molecular structure of water could dramatically change physical and physiological properties of water. Water has the capacity to receive, store and to pass on information in the form of electromagnetic signals. Among the works providing the evidence of "water memory" effect is one published in the reputable magazine Nature (Davenas, 1988). In that work there was identified preservation of information in water about trace quantities of some biologically active substances (i.e. its factual chemical activation). That information was preserved even after an ultimately strong dissolution, when molecules of a dissolved substance in water were completely absent. This work describes investigations in classical immunology conducted by the scientific group of a French biochemist J. Benveniste. He studied the effect on blood cells, called basophiles, protein molecules specifically affecting these cells and causing their specific response reaction, which is called degranulation. Conventional biochemistry is based upon the belief that the higher the concentration of such proteins the higher the rate of such reactions. Accordingly, with lower concentration the rate should also be lower. In contrast to that, the experiments have revealed that at even the strongest dissolution of protein molecules (antipolyglobulines) when their relative concentration was lower than 10^{-30} (which is equivalent to only one molecule per 70 liters of water!) a clearly pronounced effect of degranulation of basophiles was observed. Since the volume of a pan where the experiments were carried out was naturally much lower than 70 liters, it means that there was not a single protein molecule in the volume of water after repeated dissolutions. It is proposed that the information retention within water results from dynamic modification of the molecular structure of water.

At the first glance, it appears that water cannot have any long-term memory. It follows from simple estimates. For a long time continuous (quasi crystalline) model of water was the dominant one. Within the framework of this model the spatial structure of potential energy for each one of H_2O molecules is nearly a periodical three-dimensional system of pits and barriers. It is the result of a self-regulating movement of all water molecules, which represents a combination of two independent processes – vibration movement in each one of potential pits and random (fluctuation) leap into a neighboring pit. The average frequency of vibrations in potential pits is approximately the same as the Debay frequency in a solid body (about $\omega_D \approx 10^{13}\ c^{-1}$). The average duration of a leap into a neighboring potential pit is equal $\tau_0 \approx 10^{-13}$ c. The average time of staying in one pit is determined by the water temperature T and the energy of activation $\Delta W \approx 0.2$ eV of the diffusion process (the height of the barrier between neighboring pits). Staying within the framework of this model it is easy to make a conclusion that water memory must be preserved for not much longer than the value $<\tau>$, which is by many orders less than data received in numerous experiments. There are two ways out of this logical dead end: either the experiments are not reliable, or the continuous model is incomplete (or wrong).

The increasing number of reliable experiments shows that the continuous model is inadequate for the description of water structure. Moreover, continuous non-structural water (according to the data by the Nobel Prize winner Juan Lee) should be not a liquid but a gas because of a relative weakness of hydrogen links. The presence of a spatial structure in a volume of water was first proved by Bernal (1933). Calculations made on the basis of quantum chemistry have shown that water molecules participate in creation of molecular assemblies and may form different types of associated molecules: "hydrol" H_2O, "dehydrol" $(H_2O)_2$, "trihydrol" $(H_2O)_3$ and so on. Further studies have shown that even much larger associates (clusters) may form in water from water molecules and their structure resembles the form of small pieces of ice. As a rule, these clusters are unstable and appear and disappear spontaneously. The dynamics of such associates lies in the basis of the cluster model of water (Nemetry, 1962). More detailed studies, for example Samoilov, 1957, have shown that the so-called "clathrate" model is the one closest to reality. In its final form this model was developed by Pauling (Pauling, 1959). The basis of the Pauling's model is the concept that unification of atoms of oxygen and hydrogen can create spatial flexible tetrahedral frames. Formation of a tetrahedral frame was due to the fact that the natural spatial angle between OH-links in a free water molecule H_2O is equal to 104.5°, which is sufficiently close to the exact value of the tetrahedral angle 109.5°. In the joints of the crystalline frame there are very large (in the scale of a water molecule) micro cavities (microscopic empty spaces) with rigid atomic walls. The main elements of this structure are right polyhedrons linked to each other – dodecahedrons. Such systems are called "clathrate hydrates". The entire frame is held together by hydrogen links. They fasten together a system of pentagonal dodecahedronic polyhedrons from ions of oxygen and hydrogen, which form the walls of the micro cavities. Each one of the polyhedrons may be characterized by an inscribed sphere with radius about $R_c \approx 2.6$ A°. All polyhedrons have 12 pentagonal facets, 30 edges connecting these facets and 20 vertexes with 3 edges converging in each one of them. On the vertexes of these polyhedrons there are 20 molecules of water H_2O, each one of which having three hydrogen links. The space structure of the system of clathrate hydrates in water is presented in *Fig.1*.

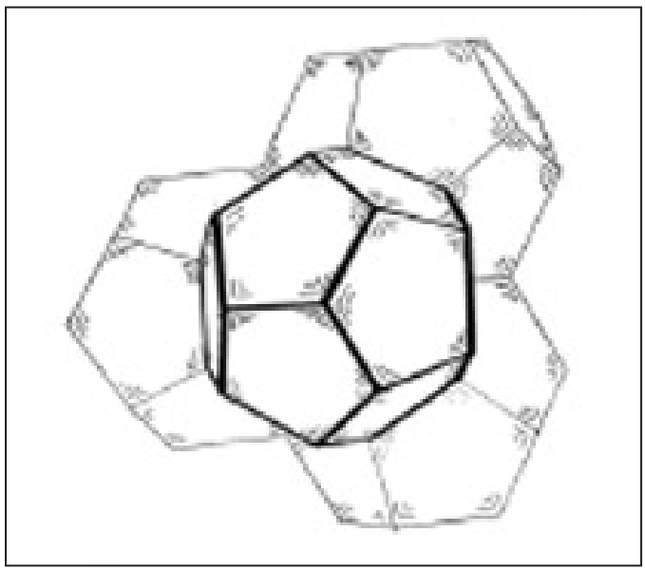


Fig.1 The system of clathrate hydrates in water.

Beyond this frame there are quasi free molecules of "regular" isotropic water, the features and the structure of which approximately match the continuous model. Micro cavities are linked to the outer space by windows with diameter of about 2.5 A°, which is slightly less than diameter of a water molecule (2R ≈ 2.76 A°). As a result, each of the micro cavities is separated from "external" amorphous quasi free water by a circular potential barrier with width about 0.13-0.15 A° bounding each window. Relative quantity of molecules of "frame" water at room temperature is 20-30% and it increases with lower temperatures. In the volume of micro cavities one molecule of H_2O, CH_4, O_2 or N_2 may be accommodated.

The results of direct measurements (Zenin, 1999) have shown that optical properties of structured and amorphous water at the same temperature differ by a very large margin. Specifically, the difference in characteristics for refraction of the clathrate frame and amorphous water reaches in some cases 4-5%, which testifies of spatial ordering of the clathrate frame. The Pauling's clathrate model explains very well all features of water including its anomalous

condensability. The DNA structure ideally matches the spatial structure of such framed water, given that each macromolecule of DNA regulates water at the distance of up to 300-500 A° away from its surface. Many works address the possibility of unification of the Pauling's model with the cluster model. In that case, separate elements of clathrate frames may, from time to time connect with each other by hydrogen links and form groups with ordered structure (or clusters). The examined features of spatial water structure show that water molecules are always distributed between two loosely connected systems: the quasi amorphous non-structured water and the quasi crystalline structured system of clathrate hydrates. During the process of external influence on water (activation) there is a significant change of its structure and parameters. The hierarchical micro level of the water structure is related to the processes of movement and distribution of separate H_2O molecules between micro cavities of the spatial clathrate water frame and quasi-amorphous non-structured water. That micro level determines non-stationary evolution of H_2O molecules. The process of evolution is determined by two possible directions: molecules can leave the volume of quasiamorphous water, penetrate the volume of these micro cavities and stay there for a long time in hydrophobic form, or, to the opposite, transfer from micro cavities into the volume of quasi-amorphous water. It is clear that the micro level of water structure is distinguished by a much greater stability with respect to effects of external influences. With all external transformations of the clathrate frame hydrophobic H2O molecules remain in a stable state in the volume of micro cavities. Such stability makes the micro level of water structure an effective object for organization of a system of long-term water memory. Such principle provides reliable binary system of water memory: occupied clathrates and vacant clathrates of water molecular structure. Another word the presence of a clathrate frame of water may lead to formation of long-term memory and to the recording of information in it.

This property of water is especially important for living organisms: on the one hand water acts as an information carrier within the organism itself, while on the other hand essential information necessary for life is carried by water from the outside environment into the living organism. It is generally known that all metabolic reactions in living organisms take place within colloidal solutions. In colloidal solutions substances are dispersed in such a fine manner that they can no longer be differentiated from the liquid. Important examples are blood, plant juices, etc. Disturbances of these colloidal systems, or even worse, their total disruption are synonymous with degenerative conditions of diseases. There is a relationship between the health of living organisms and the colloidal state in its tissues. The stability of colloidal solutions stands in a direct physical relationship to the molecular structure of water. It is important for the stability of colloidal systems that the structure of water exerts a great degree of organization upon the colloidal particles. The extent and propagation of such an ordered state throughout the water could be described as its information content. Another word the more organized the molecular structure of water the more stable is colloidal system.

The *association-induction* (AI) hypothesis is based on the concept that water in cells is in a unique state and that the living state does not exist without such water. This state is called polarized multilayers and relies on the spacing of polarized groups on the protein backbone that increases the effective distance over which they affect water molecules. Water in polarized multilayers is in a higher energy (activated) state than in bulk water and can exclude solutes selectively. The AI hypothesis affirms that the majority of intracellular ions are adsorbed by charged sites on macromolecules; the preferential adsorption of potassium ions (K+) is possible due to the inductive effect of the neighboring molecular groups that affect the electron densities of carboxyl groups of proteins. Most of studies indicate that normal proteins production in the body dependes on the cellular metabolism and proper cell depolarization, which activates voltage-gated [Ca.sup.2+] channels as well as the normal transportation function. It is scientificaly proved fact that electrical activity of the cells has direct correlation with physical properties (dielectric permittivity, electrical conductivity and viscosity) of intracellular water. Extracellular water is the main transportation agent in the body. The extracellular water (fluid) plays an important role in both direct and indirect transport in the cells. The cytosol of animal cells contains a concentration of potassium ions (K^+) as much as 20 times higher than that in the extracellular fluid. Conversely, the extracellular fluid contains a concentration of sodium ions (N^+) as much as 10 times greater than that within the cell. These concentration gradients are established by the active transport of both ions. And, in fact, the same transporter, called the Na^+/K^+ ATPase, does both jobs. It uses the energy from the hydrolysis of ATP. For example, the Na^+/glucose transporter is used to actively transport glucose out of the intestine and also out of the kidney tubules and back into the blood.

One of the primary magneto biological mechanism associates the effects of subtle magnetic fields with altered states of liquid water in biological systems. The structural changes in water that result from the influence of external magnetic field are further transmitted to the biological level, since water takes part in a variety of metabolic reactions. The basic idea

of Molecular Resonance Effect Technology (MRET) is the direct transmission of prerecorded molecular activity signals to biological systems with the help of Activated water. Several tests presented below confirm the alteration of the physical properties such as proton dispersion, dielectric permittivity, electrical conductivity, and viscosity of water after MRET treatment.

NMR test was conducted at the laboratory of Department of Chemistry of San Diego State University by Dr. Leroy Lafferty. The experimental data were recorded on INOVA-500 spectrometer. Each sample of MRET Activated and regular water was inserted into 10-ml NMR test tube, and a 5-ml NMR tube filled with D_2O was then inserted into the 10-ml test tube to provide a lock signal for the NMR. A 90° second pulse was used for the experiment. Acquisition time was set to 5.000 sec with one second delay, and a spectral width of 8000.0 Hz was employed. Line broadening was utilized and set to 0.2 Hz. Fourier transformation was performed on each spec following the scanning. Signal peak was observed for all samples, indicating that both Activated and regular water samples are free of detectable organics. Experimental data revealed a consistent 2.1 times increase in the width of proton peak in the line of NMR absorption for the samples of Activated water in comparison with a sample of regular water from the same source. This fact provides evidence that proton activity in MRET activated water is differing to compare with non-activated water (*Fig.2*).

Nuclear Magnetic Resonance Test.

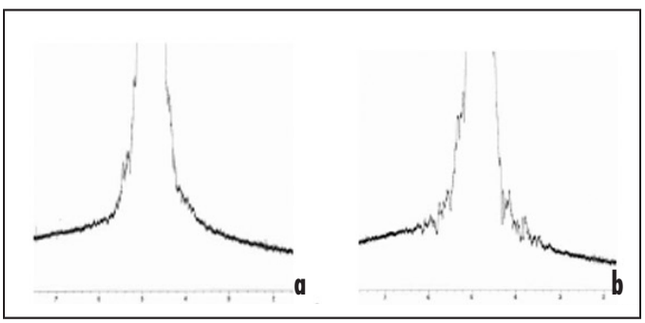


Fig. 2 NMR test result: A- sample of regular water, and B- sample of Activated water. Observe H1, 499.9189962 MHz for both samples. Proton dispersion in Activated water sample is increased.

Another experiment was conducted at Moscow State University, Russia under the supervision of Prof. V. Vysotskii regarding the physical and the electrodynamic characteristics of MRET Activated water. In order to determine the characteristics of dielectric permittivity and electrical conductivity of MRET Activated water the standard method of measurement of impedance characteristics of AC electrical current was used. The testing equipment "Novocontrol" which includes generator of AC electrical current, impedance analyzer, system of thermostatic measurement chamber, and data analyzer was used for this measurement procedure. This testing equipment allows detecting and analyzing the power, electrical current, and shift of the phase between electrical current and power. Based on this experiment it was found that MRET activation process changes dialectical permittivity and electrical conductivity of water (*Fig.3*).

Test of Electrodynamic Characteristics of Water.

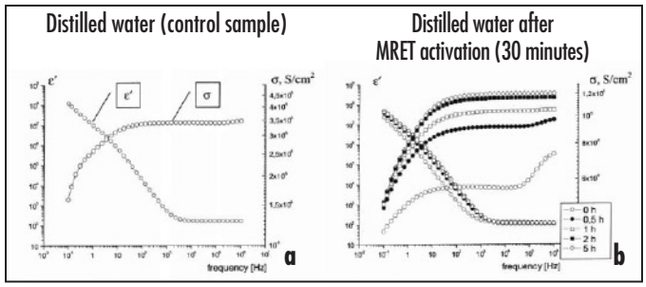


Fig. 3 Measurements were conducted at 20°C. After MRET activation process, in the range of frequencies f < 10 3 Hz dielectric permittivity (ε') reduced by 6-7 times, and electrical conductivity (σ) reduced by 2.5 times.

This experiment also provides information regarding the changes of dielectric permittivity and electrical conductivity of MRET Activated water depending on different time of storage after activation process.

These anomalous electrodynamic characteristics of MRET Activated water provide some evidence regarding its possible effect on electrical activity of the cells. The relationship between such electrodynamic characteristic of water as dielectrical permittivity and biochemical activity of cells can be explained with the analysis of dispersion characteristics of deoxyribonucleids (DNA). Deoxyribonucleic acid (DNA) is a high molecular biopolimer with a linear chain consisting of alternating monomeric units – deoxyribonucleotides (shortly – nucleotides). Four types of monomers are normally found in natural DNA: deoxyadenosine monophosphate (adenine), deoxyguanozin monophosphate (guanine), deoxytimidin monophosphat (timine) and deoxycitidin monophosphate (cytosine). The basis of an informational structure of a DNA macromolecule is alteration of sequences of four basics – A, G, T and C. This sequence determines the code of hereditary information. In a double DNA spiral there is, on average, about the same quantity of four main nucleotides, provided that naturally the quantity of nucleotides included in their respective complimentary pairs AT and GC is matched exactly. The mole ratio of different pairs changes only slightly (by not more than 2-5%) in different organisms and also from molecule to molecule in same cells. In the process of forming DNA spiral structure water surrounding a DNA spiral, plays a very important role. In the absence of water (for example, on the surface of covering glass) cross section of a molecule of DNA assumes the ellipsoid shape. The distance between adjacent pairs of nucleotides equals 3.4 A° and each turn of the spiral contains 10 nucleotide pairs. A spiral with such parameters represents the so-called "stretched" Bform of DNA, which is an unstable meta stable form of a molecule, distinguished from the stable "compressed" A-form with eleven nucleotides by one full turn of the spiral and spiral step of 28 A°.

The DNA spiral with step 28A° (A-form) corresponds well with the quasicrystalline water structure. DNA is capable of bringing water into order on the distance of up to 1000 A° from its surface. Transfers between forms A and B in the result of dehydration of DNA is a non-specific reaction on very different forms of external influence (radiation, heat, pH, etc.) conditional upon breaks of hydrogen links, neutralization of phosphorus groups as well as suppression of their dissociation. Regulation of protein synthesis and the process of self-reproduction is accomplished by a DNA free of protein casing, activated in the result of protein depravation and the A→B transfer. The character of interaction of fragments of biological molecules largely depends on their dispersion characteristics.

It is a known fact that none of the enzymatic methods of reparation of damages to DNA can fully restore ruptures of complementary chains of a DNA spiral. It happens because in order for an enzyme to fulfill its "repairs" it needs a special platform, on which such restoration of DNA integrity is performed. In case of single breaks, an undamaged complimentary DNA string serves as such a platform.

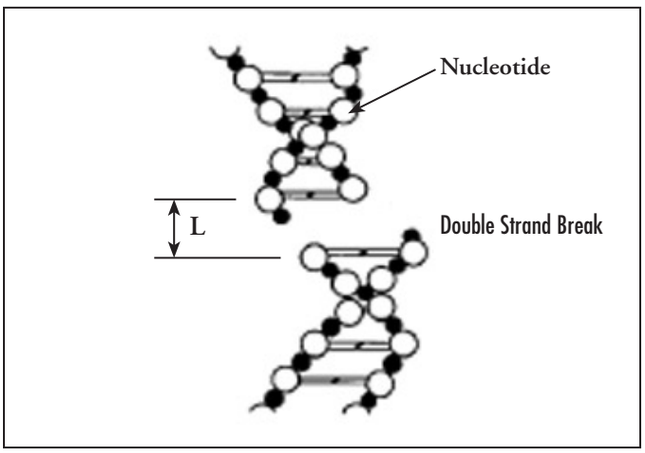


Fig. 4 Spatial structure of a DNA spiral in the area of a double break

In case of double breaks, such possibility is no longer feasible. This, at a first glance, must lead to an irreversible destruction of DNA with a loss of genetic information. The only possibility of restoring DNA in this case is by using the method of non-enzymatic self-reparation mechanism. The efficiency of implementing the mechanism of nonenzymatic reparation depends on the features of long-distance force interaction between ruptured parts of a double-string DNA spiral in liquid inner molecular environment. Since dispersion parameters of the nucleotides are stable and they cannot be controlled, the only possibility of regulating the process of self-reparation of DNA is through controlling the dispersion parameters of water in liquid inner molecular environment. These dispersion parameters directly depend on dielectric permittivity and conductivity characteristics of water.

Another test regarding the viscosity parameter of MRET Activated water was conducted with the help of reometer RS 150L in compliance with standard methodology for this instrumentation. This experiment revealed that after MRET treatment the viscosity of Activated water decreased dramatically by 400-500 times compared with regular water in the area of small pressure magnitudes. This test results may explain the beneficial effect of MRET Activated water for biological systems because blood stream in the veins and arteries of the human body has very low pressure. This test result shows that MRET activated water has viscosity $\eta = 0.0004$ Pa*s when pressure $\tau = 0.0045$ Pa, and regular water under the pressure $\tau = 0.004$ Pa has viscosity $\eta = 0.22$ Pa*s. (*Fig. 5 and Fig. 6*)

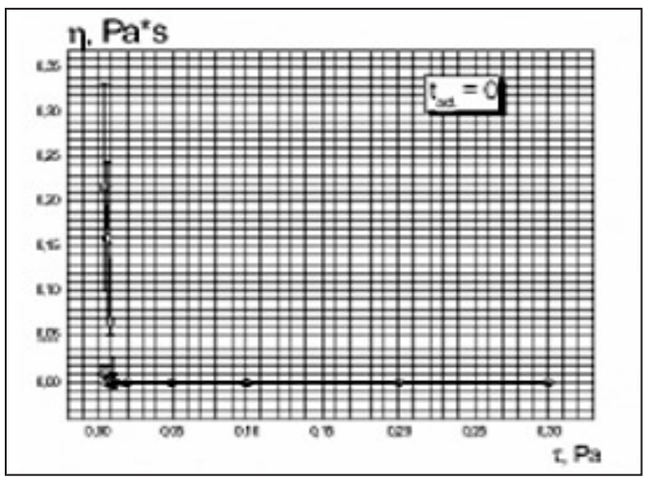


Fig. 5 The values of the regular water viscosity versus the pressure values.

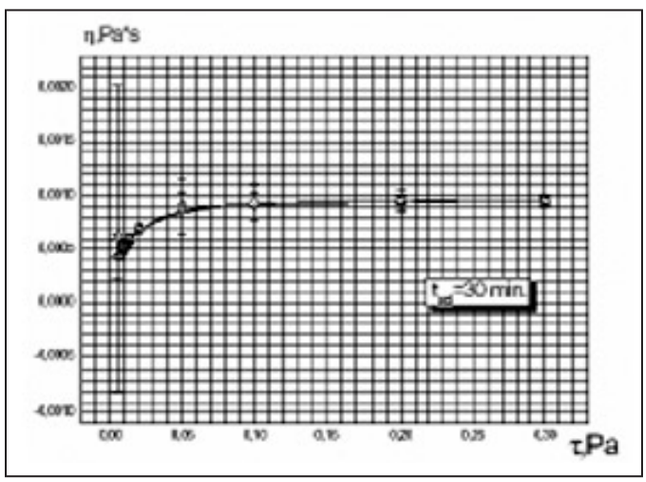


Fig. 6 The values of MRET water viscosity versus the pressure values.

It is clear that in the area of small pressure magnitudes MRET water has anomalously low viscosity. It means that MRET water has a "super liquidity" characteristics and possesses a very low resistance when it penetrates through small porous and capillary in the body. Based on this fact it is possible to conclude that MRET Activated water may significantly improve the cellular membranes function as well as the function of blood circulatory system in the body.

MRET Activated water with modified proton activity and electrical conductivity can also have ability to enhance a proton pump activity of the cells. A proton pump is an integral membrane protein that is capable of moving protons across the membrane of a cell, mitochondrion, or other subcellular compartments thereby creating a difference or gradient in both pH and electrical charge. As a result it may lead to the restoration of the transduction signaling and restoration of the normal cellular functions.

The number of clinical observations regarding the effect of MRET Activated water on different types of patients prove the evidence of the validity of the proposed hyposisis. For example, Dr. Peerayot Trongsawad, MD, Pension Officer and Ex-Director of AIDS control Department, Bangkok Metropolis, Thailand presented the following clinical observations:

The 1st Case: *Stroke*

Name: Mrs. Thongsai Sukkavee
Age: 82 Years
Date: 13th June 2004

The 82 years old Thai woman had a lung stroke with a starting sign of hyperventilation. She was immediately warded into the hospital. A few days later, she suffered from brain stroke with further paralysis problems, heart attack and gastric problem. She was treated by a team of doctors with the best medication available for 4 days with no sign of improvement. Dr. Peerayot requested the therapeutic team to replace regular water with MRET Activated water into the ND tube – 20 ml every 4 hours with the medications.

Four days later, this 82 years Thai woman began to show the signs of recovery. One month after she started the consumption of MRET Activated water, she began to breathe on her own and her heart was functioning without any support. Two month later, she could speak and laugh.

Now, one year after her stroke, she lives healthily with her daughters, still drinking MRET Activated water.

The 2nd Case: *Myocardial Infarct*

Name: Mrs. Thongchan Chearviboon
Age: 61 Years

The 61 years old nurse, name T.C., was diagnosed as MI for 20 years. She was treated by cardiologist in the public hospital with full medication. In spite of the treatment, she continuously had the heart attacks and had to take medicine everyday. She started drinking MRET water on daily bases (the same volume as the ordinary water) since 20th April 2004. Within 2 months of drinking MRET Activated water she stopped suffering from heart attacks. When she went back to see her doctor, the doctor indicated that she had recovered from Myocardial Infarct and was discharged from the Cardiac Clinic.

The possible medical explanation: MRET activated water with anomalous viscosity parameter possesses the ability to dilute the hemoglobin, and as a result to enhance the ability of hemoglobin to bond oxygen and to carry it to the tissue. Therefore, the cardiac tissue was recovered back to normal condition.

The 3rd Case: *Myocardial Infarct (heart-attack)*

Name: Mrs.Chanai Thueng
Age: 53 Years
Date: 29th Aug. 2004

The 53 years old Thai woman was suddenly admitted into a private hospital.

She was diagnosed with myocardial infarct, hypertension, hyperliperdemia and diabetes type II. Subsequently, she was transferred to a government general hospital. During the transfer, she showed sign of weakness, blurs of consciousness and was unable to walk alone. At the government general hospital, she started initially to drink 3 glasses of MRET Activated water each day in addition to the medications she was taking.

Two days after she began drinking MRET Activated water she looked fresh, spoke louder and could walk 1000 meters from her home to Dr. Peerayot's office to collect MRET Activated water. One week later she was up doing the daily household work. Many of her friends in the neighborhood were surprised at her recovery.

The 4th case: *Psoriasis disease*

Name:
Mrs. Benchamad Pasaprated
Age: 37 Years
Date: 13th Aug. 2004

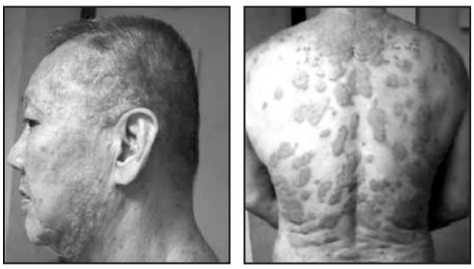
Before

Present

The female, name B.P., 37 years old, was diagnosed as terminal AIDS with the symptoms of lung tuberculosis, active PCP and also Psoriasis all over her body.

Her symptoms were the low fever in the afternoon and in the evening, loss of appetite; she looked sick and pale, had red face, red spots on skin, and white scales all over her body and felt itching all the time. Since 13th July 2004 she started to drink 1.5 liters of MRET Activated water every day. In seven days the symptom of itchiness disappeared, 40% of red spots has become the Hyper-pigmentation, the face looked fresher than before, she got no fever and showed more confidence in herself.

The 5th Case: *8 years of suffering from Psoriasis – relieved in 4 months*



Before

Name: Mr. Manop Chanteeanukhun
Age: 63 Years
Date: 3rd July 2004

Present

This is a 63 years old Thai man. His lesions were distributed at his face, scalp, all over his back from his neck to his trunk and all 20 nails of his hands and feet. His only medication was antihistamines bought in the drug stores, as he had no money to consult medical doctors. MRET Activated water was introduced to him on 30th June, 2004. He drank 3 glasses of MRET Activated water a day without any medication. The next day he felt his itching subsiding. A week after the lesions on his skin was fading down, with lesser itch. Two months later his psoriasis lesions have completely disappeared. Four months after his first cup of MRET activated water all 20 nails on his hands and feet recovered with the symptoms of skin rejuvenation all over his body.

The 6th Case: *Parkinson's Disease*

The male patient, name N.P., 65 years old, was diagnosed with Parkinson's disease for 8 years. All the time he had been treated by neurologist. His symptoms were difficulty in walking, tremor of hands, masking face, no reaction to impulse, he could not speak loudly and his life expectancy became extremely low.

After he had drank MRET Activated water for 3 weeks, there were significant improvements: he could walk for longer period of time, spoke louder and he began to smile and did not show any signs of stress. He can now stroll along 2 kilometers by himself on the pathway to the Mountain Khao Hin-ngam, Chaiyaphum province.

The 7th Case: *S.L.E (Systemic Lupus Erythematosus)*

The 23 year old Thai woman had a history of chronic illness for 7 years. Her doctor indicated that she contracted SLE. (Systemic Lupus Erythematosus). Two years after diagnosis, under doctor's supervision, she suffered from Kidney failure (Lupus Nephritis) with the following symptoms: fever, bone pain and muscle pain causing her sleep deprivation.

On 26 June 2004 she was introduced to MRET Activated water, and she began to drink 120 ml of MRET water daily. Her doctor recommended her to drink such small amount of water in order to prevent fluid retention. On the first day of drinking MRET Activated water she slept well all night. Since then, her condition improved gradually. 2 months after she started drinking MRET Activated water, her hematocrit improved from 14 % to 29 % without blood transfusion. Now, 1 year later, she can drink ~ 1000 ml. a day and her normal daily activity improved dramatically. (She is still in care of the same doctor's team).

The clinical observations regarding the usage of MRET Activated water as additional therapy to enhance the health, and in most cases, to alleviate patients from the suffering of their diseases are very encouraging.

REFERENCES

Davenas E., Beauvais F., Amara J. et. al., Nature, vol.333, p.816, 1988.
Nemetry G., Sheraga H.A., J. Chem. Phys., vol. 36, p. 3382, 1962.
Pauling E., " Hydrogen bonding", Ed. D.Hadzi, London, Pergamon Press, 1959
Smirnov I., "Activated Water", Explore Magazine vol.11, No.2, pp.49-53, 2002.
Smirnov I., "Electrically Activated Water", Electric Space Craft Journal, issue 33, 2002.
Vysotskii V., Smirnov I., Kornilova A., "Introduction to the Biophysics of Activated Water', Universal Publishers, 2005.