

## ANCIENT FUTURE PARADIGM IN WATER

### THE MISSING LINKS AND THE SOLUTION TO THE HYDRATION, OXYGENATION AND DETOXIFICATION OF HUMAN CELLS

By Dave Schneider, President, Quantum Age Water – June 2008

**OUR MISSION – To educate the world on the importance of cellular hydration, oxygenation and detoxification and to provide a natural, non-invasive universal solution to this most critical aspect of health for every living thing.**

We have gone the extra mile, and then some, to bring you the universally agreed upon scientific facts concerning the most important yet elusive mystery to human health - hydration. In unraveling this mystery and doing our part to separate the valid scientific data from volumes of theoretical fiction presented to current day water enthusiasts, I've bolded many of the key concepts in this document - they're that important. Now, anyone can easily grasp the truth, and better health, by understanding that **hydration of the human cell is not about the structure of or cluster size of water molecules; in fact, hydration could indeed be hindered by those things. It's about the chemical balance of the water before it's consumed or used.** Real science has a habit of eventually surfacing at some point - here's the real science.

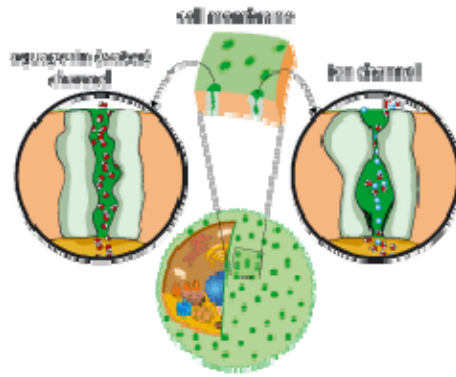
For decades, **we have theorized with no proven scientific basis concerning the mechanism and correct chemical balance of water** that allow our cells to hydrate, oxygenate and detoxify. This essential knowledge is critical to our health, and now, the solution is available with the Stirwand™ technology.

Our mission was to develop this technology to deliver the missing links in a practical, economical and responsible way. The following summarizes the steps we took to over the past three years to lay a solid, scientific foundation for positively impacting our health and environment.

#### **I. BACKGROUND BASICS**

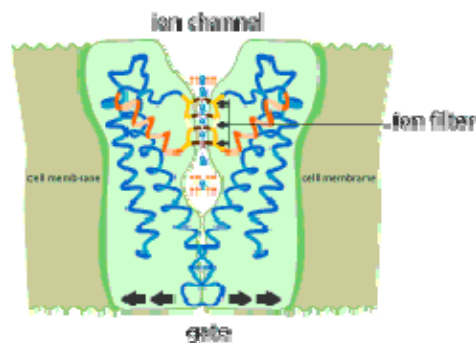
##### **Square One – How Cells Hydrate**

In the mid 1980s, Peter Agre, M.D, Professor of Biological Chemistry at Johns Hopkins School of Medicine, and his colleagues were searching for proteins that are part of the Rh factor. They soon discovered copious amounts of a much smaller unknown protein. **Within a year, this protein was proven to be biology's elusive cellular regulator of water transport.**



They named these tiny protein channels **aquaporins**, and discovered that **only single water molecules can pass through aquaporins**. The rate of flow was calculated in the hundreds of millions of molecules per second, per channel. With hundreds if not thousands of channels per cell, this equates to **hundreds of billions of water molecules per second, per cell**. These numbers provide a vivid perspective of the size of a water molecule and the amazing complexity of our cells.

During the same period, Roderick MacKinnon, M.D., biophysicist, x-ray crystallographer, and professor at Rockefeller University, was also working with human cells. He documented how a class of proteins helps to generate nerve impulses – the electrical activity that underlines all movement, sensation and **perhaps even thought**. These proteins, called ion channels, are tiny pores that stud the surface of all of our cells. These channels allow the passage of potassium, calcium, sodium and chloride molecules called ions. Rapid-fire opening and closing of these channels releases ions, moving electrical impulses, in a wave, from the brain to their destination in the body, **proving that water molecules and mineral ions have separate pathways into the cells**.



Fifteen years after their discoveries, an enormous body of work by hundreds of medical researchers in universities around the world has not only validated these findings but has shown that **virtually all life** on this planet operates on the same principals of **hydration, oxygenation and detoxification of their respective cells**, i.e. **water molecules must pass single-file through aquaporin channels, and water molecules and mineral ions have separate pathways into the cells**.

In 2003, Dr. Agre and Dr. MacKinnon were jointly awarded the Nobel Prize in chemistry for their respective contributions. I highly recommend reading all of the papers written on this topic to enlighten your path to a **healthy immune system and life**.

## **Square Two - The correct chemical balance of water that allows single water molecules to pass through the aquaporin channels**

In the late 1990's, Melonie Montgomery, PhD, of Fenestra Research in Las Vegas, NV, revealed her seminal work that **discovered the correct chemical balance of water** to meet the criteria of **single water molecules only** passing through the aquaporins. This is the most profound breakthrough in practical water science to date, as it provides the means to test water, or any other beverage, to see immediately if it will hydrate, oxygenate and detoxify or not. Fenestra's development of a cellular analyzer is what made this revolutionary work possible. It takes the guesswork out of the wellness information being widely quoted in the health care field. It also opened the window into testing, mathematically, the fluid level differences between urine, (what your body is releasing) and your saliva, (what your body is holding on to).

In the past 7 years, over 35,000 human subjects have gone through hydration testing at Fenestra Research. **This testing clearly shows that the current state of the average human is not up to the challenge of processing and absorbing enough water, even if the correct amount of water is consumed daily. 94% of the 35,000 people tested were found to be significantly dehydrated.** The need for a dependable and economical source of vast amounts of energetically balanced and stabilized water is desperately needed for the survival and potential optimal well-being of life on this planet.

## **II. THE SOLUTION**

My partner, Exavier Phoenix, can best be described as a Renaissance man of the quantum universe and a genuine visionary. Exavier found the hydration solution in nature, using various blends of rock minerals. Bringing them into what he describes as the high matrix, **these minerals balance water chemistry to a near perfect match for nature and Fenestra Research's 8 water parameters for human hydration.**

**Basically, we created a quantum event by enclosing high matrix minerals inside surgical grade polymers to create the Stirwand™, which solves the hydration dilemma that is created by the natural polarity bond hydrogen and oxygen atoms have with each other. The high matrix energy of the minerals bypasses the polymers, releasing the polarity bonds of water molecules. The freed single water molecules can pass through the aquaporin channels, resulting in increased hydration, oxygenation and cellular detoxification. Simultaneously, the freed water molecules are stabilized with this natural energy for a minimum of 48 hours in an open container, 3 months if the container is sealed.**

**For the past three years we have been conducting human clinical trials for hydration, oxygenation and detoxification, as well as testing different types of water. It's crystal clear that *what's significant in hydration is the chemical balance of water before you drink it, not where the water comes from.***

Provided you have clean potable water and the correct water chemistry, you are on your way to an average increase in hydration of **466%**, as proven in our last three-month one hundred-subject study completed in December 2007. **This is an average savings of nearly 30% of your water.**

### **III. OUR JOURNEY**

#### **Preliminary Test**

I've summarized below the methodical testing process we followed over the past 3 years, and what we learned about the effect of drinking the daily-recommended amount of water simply stirred for 20 seconds with our Stirwand™ technology. All the detailed clinical trial reports and technical papers from Fenestra Research are available on our web site.

Exavier and I began our work together to create the Stirwand™ technology in 2005, with the goal of delivering a natural hydration solution with a positive environmental impact. **We believe that this simple tool has the power to revolutionize not only how we view/treat water and our health but also how we view the universe and our responsibility to it.**

After our good fortune of finding Fenestra Research and head researcher, Melonie Montgomery, in early 2006, I sent them the first Stirwand™ to find out what it did to water based on Fenestra's testing procedures. Ms. Montgomery called to report that she was pleasantly surprised to see that the technology balanced all eight parameters of water chemistry established for hydration, and that it accomplished this, in a glass to a gallon, with just a 20 second stir.

She was even more surprised by another phenomenon: the stirred water lost no energy after the Stirwand™ was removed from the water. This finding led to a series of remarkable short and long-term stability tests, the most significant ones documenting that stirred water will remain more than **99% stable for a minimum of 48 hours** in an open bottle, and stirred water in a sealed bottle will remain more than 95% stable for a minimum of three months.

The universally accepted standard for how much water a human should consume everyday is one half of your body weight in ounces. All of our human clinical studies followed this standard, utilized purified water stirred with the "Basic" or "24/7" Stirwand™, and were performed by Fenestra Research.

#### **First Clinical Study**

We first tested five people for two weeks, two on tap water (5.5 pH) and three on purified water (5.8 pH). One of the subjects on purified water had his blood drawn

and tested for oxygen content, at baseline, and at the end of two weeks. All subjects were tested before and after with hospital quality pulse oximeters (accurate to .50 of one percent).

The tests showed an average increase from baseline hydration for those drinking stirred tap water of 18.5%, and 20.1% for those drinking stirred purified water. The oxygen increase averaged 9.7% with oximeters. The one blood draw showed a substantial increase of 12%, with similar increases documented in later testing as well.

## **Second Clinical Study**

With the confidence provided by this initial testing, we knew the ability to make a legal claim for hydration and oxygenation was within our reach and critical to our mission. To accomplish this, we began the second study using 50 people over a period of 30 days, all drinking purified water (7.0 pH). These results showed a 23.5% increase over baseline hydration and a 9.8% increase in blood oxygen. Blood draws were tested on 12 people and all fifty subjects showed a 9.4% blood oxygen increase with oximeters.

The statistics were improving and continued to improve as we looked ahead to showcasing this technology at national medical and wellness shows. These improvements resulted from Exavier's non-stop research and ability to improve the high matrix minerals, most noticeably, the advances in the milliwatt output. Milliwatts in the first study measured 2100, advanced to 3450 in the second study, and ended at 11,408 in the third study.

Upon completion of this second study, we went to our first convention and showed the Stirwands™ and our studies to the medical community. Many remarked that the Stirwand™ was the most astonishing discovery in medical science they had ever seen. **Modern medicine has no way of raising and sustaining hydration and oxygen naturally in a human.** They were astounded at how fast the blood oxygen levels increased, and how this would obviously saturate all the cells in the body with oxygen. While the show was successful, and the Stirwands™ were a hit, the doctors gave us an itemized list for additional testing they wanted us to do.

## **Third Clinical Study**

In September 2007 we began a 3 month study with a control/placebo group of 50 subjects drinking non-stirred purified water (at 7.0 pH) and 50 subjects drinking stirred purified water. The placebo group showed a 6% average increase in hydration over their baseline (logical that some were drinking more water than their normal amount) and the stirred group recording a **28.5% increase** over their baseline, **thus giving the group drinking stirred water a 22.5% margin over the placebo group.**

**The blood work on 12 arterial blood draws was significant. The 12 subjects began with an average blood oxygen level of 88% (1.4% lower than in**

previous testing) and *in just two weeks*, jumped to over an average of over 98%, an average increase of 10.25%. The oximeter readings averaged 10.33%

One of the requests of the doctors was that we provide them with blood microscopy on the 12 arterial blood draws in order to actually see what happens to blood when it's saturated with this much hydration and oxygen. You can view some of the short video clips of this work on our web site and actually see how **lifeless blood was quickly restored to healthy hydration and oxygen levels, with subjects moving from 88% average blood oxygen levels to 95% in just 7 days**. Blood cells were no longer stacked up and starving for oxygen. They were released, fully oxygenated and moving freely.

All of this resulted from simply consuming an average of only three quarts of stirred water per day for one week. **At this point we were convinced that drinking Stirwand™ water is every bit as vital as breathing oxygen through our lungs, maybe even more so.**

### **Beyond Hydration and Oxygenation: Detoxification**

As significant as the hydration and oxygenation results were, the ultimate test was to see if the 90 day testing would be long enough and if the Stirwand™ technology effective enough to register a measurable release in cellular toxins. Indeed, they were. **Releasing toxins is solely dependent on the body's ability to hydrate. We observed for the first time a significant reduction in cellular toxins, documenting an 18.2% reduction in 90 days in those drinking stirred water. The placebo group, drinking the same amount of non-stirred water, showed no change in cellular toxin levels in that same 90 day period.**

It's important to note that testing for toxin reduction was done at 30 and 60 days, with a slight drop in toxins in those drinking stirred water and no measurable toxin decline in the control group. Compare this to the increases in hydration and oxygenation, which reached over 90% of their 90 day improvement within just 14 days. **It seems that our bodies are so toxic that it takes even a therapeutic solution like the Stirwand™ a couple of months to flush out the resident toxins before we approach the measurable arena, even though the detoxification benefits begin on day one.**

Fenestra Research, even in tests conducted for as long a 180 days, reports they have never seen anything remotely close to the numbers the Stirwands™ achieved for toxin release in 90 days. Toxins are tough, but the Stirwand™ technology is more than up to the challenge with an 18.2% reduction in cellular toxin levels.

### **IV. SUMMARY – The Implications**

Clearly, beginning with the Industrial Revolution, we shot ourselves in the foot, several times. First, we destroyed our natural water, air and food supplies with chemicals, dramatically reduced our intake of water in favor of sodas and other artificial beverages and further compounded the problem with additional diuretics

to lose weight. When you diminish water intake (the only means a human has to clean out the toxins) and flush out the little remaining water with diuretics, you have the perfect recipe for creating serious health risks. Take a look around as hundreds of new, serious medical problems that didn't exist 60 years ago are now on the rise. **There is no known substitute for an adequate daily intake of water.**

Untold volumes have been written on this subject. Every lecture ever given and every book ever written on health boils down to **three essentials: hydration, oxygenation and detoxification of human cells.** It's wake-up call time. To have even a chance at achieving a healthy life, every one of us needs to drink half of our body weight in ounces of water every day, water that needs to be properly balanced and energized to make up for the damage we've done to this most precious resource. Stirwand™ technology **delivers sustainable therapeutic levels of hydration and oxygen to your cells and allows your body to release the toxins as well.**

**This knowledge of how much oxygen our cells receive from drinking balanced water is of the utmost importance to our health. Medical professionals have clearly stated for years that approximately 75% of all disease begins at some point in your life due to dehydration and lack of oxygen in the cells.** The choices we've made regarding how we live, what we eat, what we drink, how and if we exercise and the effect our lifestyle has had on the environment have put our very lives at great risk. Our research and testing with Fenestra Research validates that **we have delivered a profound solution for everyone on the planet. It's as simple as replacing artificial fluid consumption and diuretics with hydrating, oxygenating and detoxifying balanced water.**

Oxygen may not be everything in health but it is certainly among the top two. It's been said that more than 60% of our physical weight is oxygen. This makes sense, as every cell in our body is made up of oxygen and its atom size is 8 times bigger and 16 times heavier than a hydrogen atom. It is impossible for us to have any mental thought or physical function without it. **We have deprived our bodies of copious amounts of oxygen that would be provided by balanced water. Our bodies alone simply cannot chemically balance enough water to compensate for this deprivation.** For further documentation of the importance of oxygen, I recommend reading Otto Warburg's 1931 Nobel Prize winning work in chemistry, **when he proved that a healthy (aerobic) slightly alkaline cell turns cancerous (anaerobic) and goes just slightly acidic when you take away the oxygen.**

**Look at the overall state of our immune systems** and how they are being affected by the lack of resources to adequately defend us from disease. The immune system's primary resource to survive and thrive is oxygen. **We have made the case here that drinking balanced water is every bit as vital to human health as breathing oxygen through our lungs.** It's obvious that our Creator intended for both means of oxygen intake to work synergistically for optimum mental and physical health. **Balanced water may very well be the best preventive medicine there is, as it saturates all of our cells with oxygen.**

## **V. A FEW IMPORTANT TESTING DETAILS – The Eight Water Chemistry Parameters/Missing links/things to know when choosing your water**

The driving force behind all of the clinical study results, including the cellular toxin release statistics, is simply **natural energy**. Our technology is not doing anything artificial to alter water. It's important to summarize the eight parameters of water chemistry that must be addressed to allow water to do its intended job of hydrating. For more detailed information, refer to Fenestra's reports on our web site.

Parameters one and two are tests for energy, recording the **milliwatts** (potential coherent energy) and **millivolts** (kinetic energy or confused energy). **The Stirwand's™ high matrix minerals brought the 90 day test water from 90 milliwatts up to 11,408 milliwatts, while dropping the kinetic energy from 238 millivolts to 136 millivolts, all with a 20 second stir of the water. This results in highly charged negative ions to scavenge free radicals (-102 ORP), along with noticeably increased mental and physical energy.**

Parameters three, four, five, and six are: **balancing resistivity, conductivity, surface tension and specific gravity**. Based on the mineral composition, and whatever else may be present in the water, these numbers will vary but not dramatically in common potable waters. It would take excessive minerals or a large amount of contaminants to impact the effectiveness of the Stirwand™ technology. This was verified by the testing of different waters.

**Of these four parameters, surface tension is the most misunderstood.** It is widely believed that very low surface tension is beneficial, but if you review how a cell receives water molecules, you can see that if surface tension is too low, the cell would collapse and would not allow the water molecules to enter. Our technology stabilized the surface tension on the purified water at 67, maintaining firm cell integrity.

**Specific gravity** is somewhat of a "dark horse" as it's rarely spoken of in the water world. **Simply put, if your water does not have a very low specific gravity, you will not hydrate. One of the most difficult tasks of our own internal chemistry is to attempt to lower the specific gravity of water. It needs help to do this. Perfect specific gravity is 1.0, with the threshold being 1.009. Stirwands™ bring any potable water down to 1.002, and even brought horribly contaminated tap water down from 1.023 to 1.003. *The specific gravity of most spring or purified water ranges from 1.011 to 1.015, well above the threshold.***

Parameter number seven is **pH, which must remain stable or everything else falls apart**. As shown in our testing, a slight adjustment from a neutral pH, up or down, will have a negligible affect on hydration. The Stirwand™ will stabilize the pH of any potable water, but will not alter it.

The final parameter is extremely critical – **stability**. The high matrix minerals in the Stirwand™ work on any potable water, **allowing this technology to be used virtually any place in the world**, with the water remaining stable in an opened



container for at least 48 hours, and 95% stable in a sealed container for a minimum of 3 months.

### **Comment on the Stirwand™ used in the testing**

All of the testing was done using the Stirwand™ called the “Basic” or “24/7”. Therefore, this is the only one for which we can actually make the above mentioned percentage increase claims. There are 8 different Stirwands™. If we ran the same in vitro water analysis on the others (using the above 8 parameters), the results would be the same, except for the amount of energy put out by each Stirwand™. Each Stirwand™ is different simply due to the blend of minerals used to produce the individual energetic properties of each.

## **VI. OTHER APPLICATIONS AND THOUGHTS**

### **Agriculture**

As many scientists clearly pointed out in the process of validating Dr. Agre’s and Dr. MacKinnon’s findings, virtually all life on the planet hydrates and oxygenates the same way, through the aquaporin pathways. In one of his papers, Dr. Agre wrote about his discovery of aquaporins and the implications for agriculture.

As an agricultural soils consultant in the 1970’s, it’s quite natural for me to see that in foliar feeding (mixing fertilizer solution and spraying it on the leaves), the absorption can be enhanced enormously using our Gardener Stirwand™ which is designed for plants and fish tanks or ponds. To make the fertilizer solution work, a surfactant is currently used to break up the water molecules in order for them to penetrate the leaves. By simply using this technology, we can eliminate the use of chemical surfactants. In my estimation, **farmers will be able to cut back on the amount of fertilizer used simply because of the ability of the balanced water to penetrate the leaves.**

Additionally, ground watering with this technology will dissolve more nutrients into solution for the plant roots to absorb. **This equates to a savings in the cubic feet of water used and to a reduction in the use of herbicides, pesticides and fertilizer, while simultaneously rebuilding the natural biology of the soil.** I have not seen any indication, under organic conditions, that stirred water will do any more than balance the natural event going on in the soil, i.e., it will improve the aerobic presence in the soil, resulting in the plant being healthier and more disease and bug resistant and better able to achieve it’s natural size and bud count, but will not increase size or bud count. If nourished with this technology while growing, fruit and vegetable yields will also have a longer shelf life.

### **Aquaculture**

The Stirwand™ technology will pleasantly shock the aquaculture world. **One of the key issues is the availability of oxygen for the fish, i.e., the oxygen is there, but the fish are fighting for space to get to it. It’s important to emphasize that**

**you cannot add oxygen to water.** If you add an oxygen atom to a water molecule it becomes hydrogen peroxide. If you add another, it becomes ozone. Whatever amount of water you have, you have a finite amount of potential oxygen. **What the balanced water will do is make all of the oxygen available to the fish by releasing the polarity bonds of hydrogen and oxygen atoms that attract water molecules to each other.**

The Stirwand™ will create the same balance in a fish tank (salt or fresh) or in a commercial fishery that it creates in humans or plants. **Weather conditions control where the available oxygen is in the water, so the fish are always competing for oxygen and space, literally for their lives. With balanced water, they can be any where in the tank, and they'll have the all the oxygen they need,** provided they are not over-crowded once the balanced water resolves the anaerobic conditions. This will dramatically reduce the standard accepted death rate of fish from the lack of oxygen and provide a worldwide savings of billions of dollars annually.

### **Household Use – Monetary and Environmental Savings**

Beyond the huge implications for agriculture and aquaculture, there are many everyday uses of the Stirwand™. Water is the world's best solvent. We use it to wash and clean just about everything. **Water works much better in the body when the molecules are separated from each other. The same is true for water used in cleaning. This is the reason we use detergents and chemical cleaners or surfactants.** Think of the savings, both monetarily and environmentally, if you simply add the Stirwand™ in the washing machine to recruit every single water molecule to go to work cleaning your clothes. Depending on how dirty the clothes are, you might need very little detergent to simply help wash out some of the odors. I use one fourth of the normal amount of detergent if clothes are not too dirty, and half the amount if they're really dirty.

There are many other cleaning tasks made easier, with less detergent - cleaning carpets and floors, soaking crusted frying pans and stained coffee pots, washing dishes, cleaning eye glasses, brushing your teeth, etc. Whatever you use water for, it'll do a better job if it's first balanced with the Stirwand™. Dentists use stirred water for all cleaning and rinsing – not a bad idea to have a container of stirred water available for all your home dental uses as well. Note, we do not recommend using the Stirwand™ in dishwashers due to the potentially extreme heat in the drying cycle of some models.

With the ability to bring any clean, potable water to near perfect balance using this technology, the benefits of purchasing bulk water or utilizing a simple filtration device are even more apparent. The savings in terms of convenience and money and the ability to fulfill our responsibility to the environment are opportunities that cannot be ignored. This Executive Summary, if read and understood, should bring us all to this conclusion, and our clinical studies should make it perfectly clear that ***it's not how much you pay for your water, or where it comes from, that counts – it's the energy and chemical balance of the water before you drink it.***

As a final note on monetary savings - the Stirwand™ comes with a 5 year manufacturer's warranty. With minimal care, it will last a life time.

### **More To Come**

I'll be writing more, soon, about the potential impact Stirwand™ technology can have in other areas, such as athletic performance, waste management, livestock, space flight and more. The benefits of adding ionic minerals to stirred water is another topic on the list. We see a bright and expanding future for our company and the planet as we bring this critical information and technology to the world.

Good health,

Dave Schneider, President  
Quantum Age Water  
June 2008

Your Quantum Age Stirwand Dealer:



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