The Quantumn Water Vitalizer creates the healthiest drinking water that embodies the wisdom of nature and latest innovation in water treatment. It incorporates the technologies of molecular resonating, hydrogen generation, spinning magnetic vortexing, oxygenation and mineralization. This allows lifeless processed water to be revitalized back into its natural state

with its natural self-cleaning, life supporting properties:

Living & Microclusters

An natural alkaline pH

High antioxidant molecular hydrogen

Enhanced dissolved oxygen

Decreased blood viscosity

Quicker cellular hydration

Enriched selenium calcium magnesium zinc etc.

Up to
Dissolved H2: 1200ppb
Dissolved O2: 9ppm
ORP: -650mV

The vitalized water from the Quantum Water Vitalizer is similar to the structured water found in healthy tissues, can be absorbed quickly by the body cells. It also has anti-cancer properties by strengthening the NK cells. It will bring energy youth and health to you and your family.

### **Quantumn Water Vitalizer**

#### Science Replicates Nature



Dissolved H2: 1200ppb

Dissolved O2: 9ppm

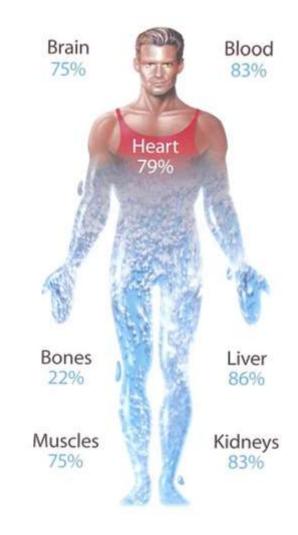
ORP: -650mV



## Water is Life



#### Your Body is 60-70% Water



© Waterwise 2000-2008 Form 1814 • Rev 05/08

# Water's quantum weirdness makes life possible

WATER' S life-giving properties exist on a knife-edge. It turns out that life as we know it relies on a fortuitous, but incredibly delicate, balance of quantum forces.

Water is one of the planet's weirdest liquids, and many of its most bizarre features make it life-giving. For example, its higher density as a liquid than as a solid means ice floats on water, allowing fish to survive under partially frozen rivers and lakes. And unlike many liquids, it takes a lot of heat to warm water up even a little, a quality that allows mammals to regulate their body temperature.

#### 水的量子怪异使生命成为可能

水的生命赐予的属性存在于刀刃上。事实证明,我们所知道的生命依赖于一种偶然的,但难以置信的微妙的量子力量的平衡。

水是地球上最奇怪的液体之一,它的许多奇形怪状的特征使它给予生命。例如,它的密度比固体更大,这意味着冰漂浮在水面上,使鱼能在部分结冰的河流和湖泊中生存。不像许多液体,水的加热需要大量的热量,即使是一点点,这是一种允许哺乳动物调节体温的质量。

# Five Properties of Water 1. Attraction to other polar molecules 2. Stores heat: High specific heat 3. Stores heat: High heat of vaporization 4. Low density of ice 5. High polarity

#### Water created by nature is living and structured

Water becomes lifeless after losing its life-energy through extensive piping, electro-smog and chemical poisoning. That is why fish cannot survive long in the chlorinated tap water.

The potent energies that natural, healthy water had accumulated through absorption of nature's energy and its exposure to beneficial geomagnetic field contributes are lost.

Good structured water has a memory of its natural living environment. It has a balanced pH and is able to hydrate due to its high vibrational strength held within the hydrogen bonds.

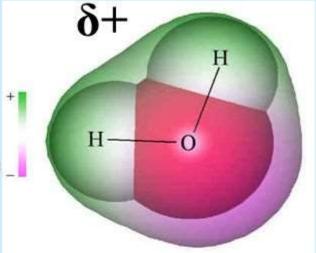


It is known in mountainous regions like Caucasus in Russia, Hunza in Pakistan, Bama in China people commonly live healthy and productive life for over 100 years, while their diets were different, the one thing they had in common was the type of water they consumed which are naturally clean, minerals rich, slightly alkaline, micro-structured, high in dissolved oxygen and carrying Earth energy (or geomagnetic energy).

## **Polarity of Water**

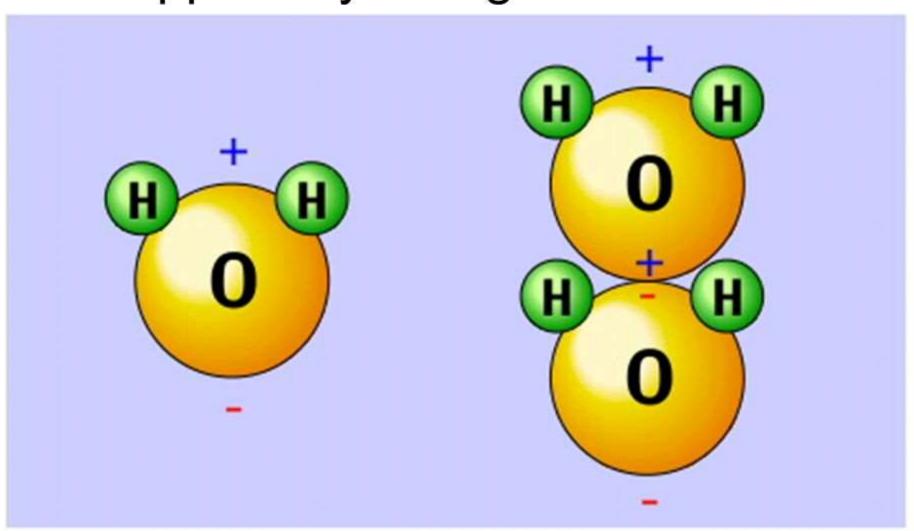
 A water molecule forms when two hydrogen atoms form single polar covalent bonds with one oxygen atom

- Oxygen is more electronegative, the region around oxygen has a partial negative charge.
- The region near the two hydrogen atoms has a partial positive charge.



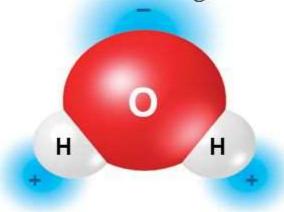
A water molecule is a polar molecule with opposite ends of the molecule with opposite charges.

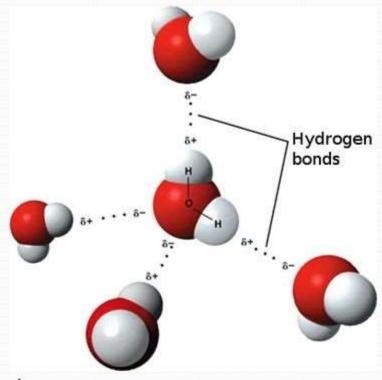
# Polar molecules act like little magnets. The oppositely charged ends attract.



## Polarity and Hydrogen Bonding

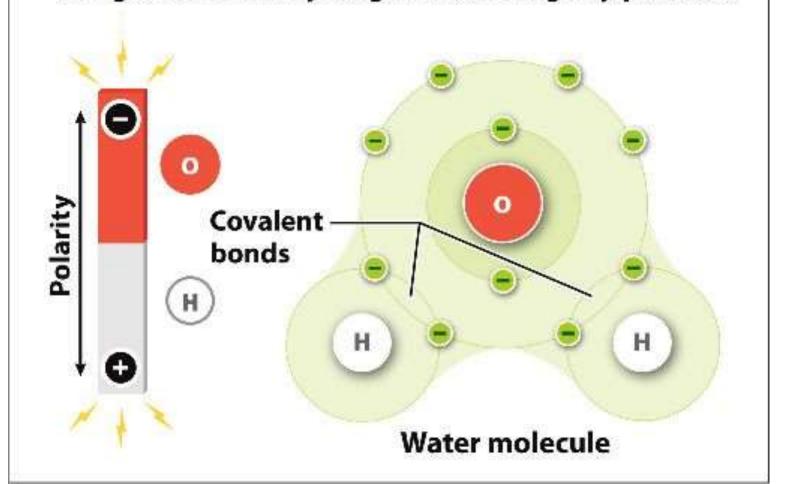
Water is a polar molecule.
 Polar molecules have slightly charged regions. The molecule is a bit like a magnet with two poles.

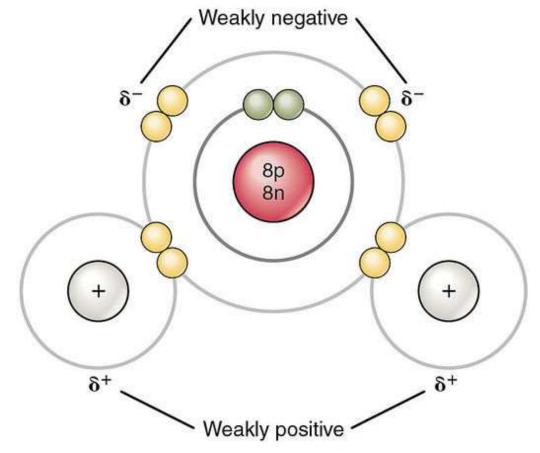




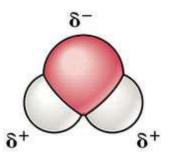
- Nonpolar molecules do not have charged regions.
- Hydrogen bonds is a weak bond formed between slightly positive hydrogen atoms and slightly negative atoms.

In a water molecule, oxygen's eight positively charged protons attract electrons more readily than does the single proton in the hydrogen atoms. As a result, the electrons are pulled toward the oxygen side of the molecule, making it slightly negative in charge, while the hydrogen side is slightly positive.

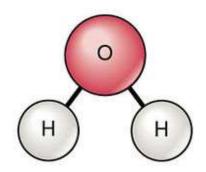




(a) Planetary model of a water molecule



(b) Three-dimensional model of a water molecule



(c) Structural formula for water molecule

# WHAT IS BLOOD?

And What You Can Do To Keep Your Blood Youthful & Live Until Your 100 Years Old!

# BLOOD IS THE THAT GIVES...



#### LIFE

IT TRANSPORTS OXYGEN FROM THE LUNGS TO BODY TISSUE AND CARBON DIOXIDE FROM BODY TISSUE TO THE LUNGS.

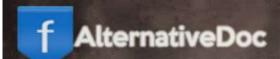


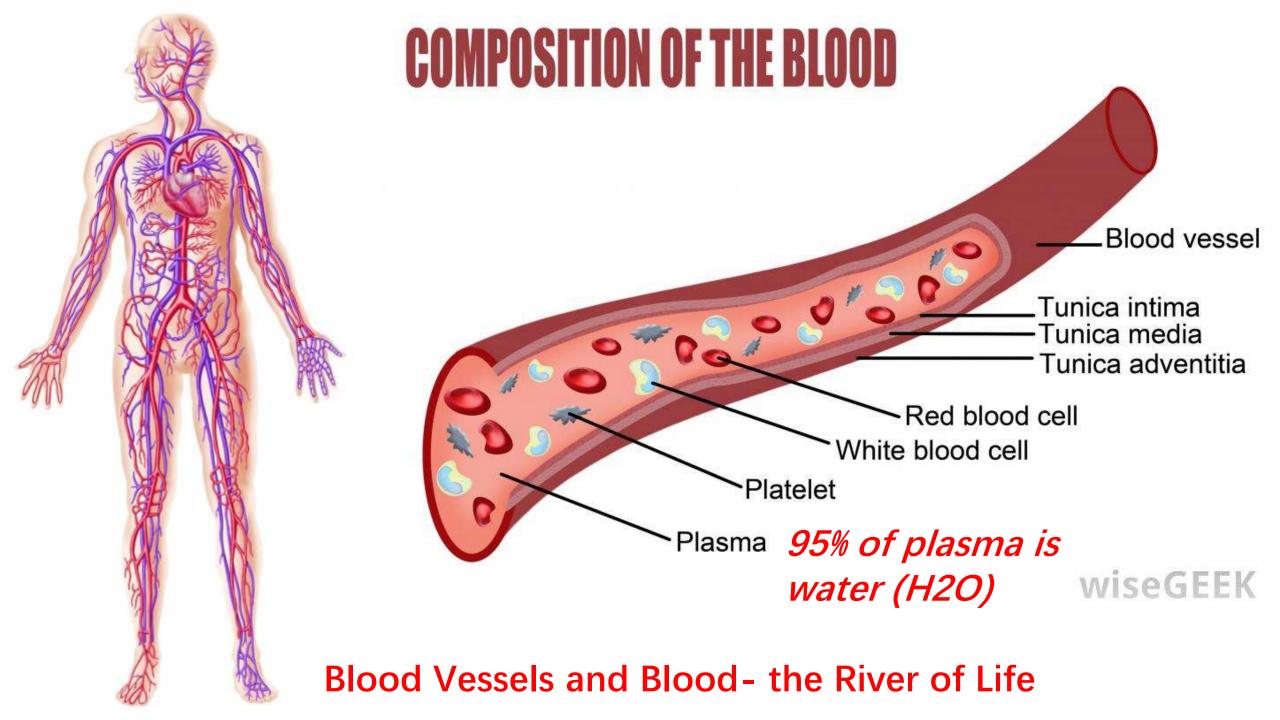
#### **GROWTH**

NOURISHMENT FROM DIGESTION AND HORMONES FROM GLANDS ARE TRANSPORTED THROUGHOUT THE BODY.



DISEASE FIGHTING SUBSTANCES ARE CARRIED TO THE TISSUE AND WASTE TO THE KIDNEYS.





**Blood viscosity** 



Blood is a vigorous organ, it behaves as a non-Newtonian fluid-its viscosity changes. When blood moves quickly as in peak-systole, it is physically thinner; when it moves slowly during end-diastole, it is thicker and stickier. This is because red cells aggregate. The phenomenon is known as the shear-thinning, non-Newtonian behavior of whole blood.

The blood is the source of the human life. There are four components of blood: blood plasma, red blood cell, white blood cell and blood platelet. The red blood cell transport the blood oxygen and kinds of nutrition to our each organs.

Along with the age growing, our life style or live situation, the kinds of fat, cholesterol, lipid garbage wrap or surround the blood cells. Our red blood cell become **hyper viscous**. It becomes very sticky to pass through the vessel wall. It Means the red blood cells can not transport oxygen and nutrition to our body organs. The metabolism become difficult. The microcirculation have problems. It causes the hypertension, hyperlipidemia, hyperglycemia, diabetes. Finally causes the stroke, cardiovascular and cerebrovascular sudden death etc.

#### What is blood viscosity?

Blood viscosity is a measurement of the thickness and stickiness of a patient's blood. This important hemodynamic biomarker determines the amount of friction against the blood vessels, the degree to which the heart must work, and the quantity of oxygen delivery to the tissues and organs. It is a direct measure of the "flow ability" of blood and is modifiable with existing naturopathic therapies. Blood viscosity is correlated with all known risk factors for cardiovascular disease, including age, sex, smoking, obesity, inflammation, insulin resistance, high blood pressure, low high-density lipoprotein cholesterol, high low-density lipoprotein cholesterol, and others. Elevated blood viscosity is a strong independent predictor of cardiovascular events. In the Edinburgh Artery Study, elevated blood viscosity was the strongest predictor of stroke risk, after controlling all other major risk factors.

It is important to understand the role of blood viscosity as a clinical marker. To do so, one must know something about how the physics of blood flow works and about what affects blood viscosity.

#### 什么是血液粘度?

血液粘度是测量病人血液厚度和粘稠度的方法。这一重要的血液动力学生物标志物决定了对血管的摩擦力,心脏必须工作的程度,以及氧气输送到组织和器官的数量。它直接测量血液的"流动能力",并可通过现有的自然疗法治疗。血液粘度与心血管疾病的所有已知危险因素相关,包括年龄、性别、吸烟、肥胖、炎症、胰岛素抵抗、高血压、低HDL (高密度脂蛋白胆固醇)、高LDL(低密度脂蛋白胆固醇)等。血粘度升高是心血管事件的一个强有力的独立预测因子。在爱丁堡动脉研究中,在控制了所有其他主要危险因素后,血液粘度的升高是中风风险的最强预测因素.了解血液黏度作为临床标志物的作用是很重要的。要做到这一点,你必须了解血液流动的物理原理以及影响血液黏度的东西。

#### Clinical Implications of Altered Blood Viscosity

We see the consequences of hyperviscous blood primarily in damage to the blood vessels, in overwork of the heart, and in decreased delivery of oxygen to the tissues. Highly viscous blood pounding against the walls of the blood vessels leads to abrasion of the single-cell layer of the intima in the carotid, pulmonary, and coronary arteries. The body responds with a protective adaptation, creating a scab (plaque), which eventually calcifies in an effort to protect the blood vessel. The longer-term result, of course, is increased turbulence (because of the no-longer smooth wall) and an ever-narrowing channel for blood flow. This result requires the heart to work harder, pushing the viscous blood out at even higher pressures, further damaging the intimal layer. At the other extreme of the vascular tree, we see decreased perfusion of the tissues as the stiffened erythrocytes of viscous blood scour the capillary linings. The body responds by thickening the capillary walls, decreasing diffusion of oxygen and nutrients into the tissues. This effect is most pronounced in tissues where healthy capillaries are essential for unimpaired function such as the kidneys, eyes, fingers, and toes.

#### 改变血液黏度的临床意义

我们看到高粘血的后果主要是对血管的损害,心脏的过度工作,以及减少氧气输送到组织。高黏性血对血管壁的冲击导致颈动脉、肺动脉和冠状动脉内膜的单细胞层的磨损。身体以一种保护性的适应反应,形成一个痂(斑块),最终钙化以保护血管。长期的结果当然是增加了湍流(因为没有光滑的墙)和一个不断缩小的血流通道。这个结果需要心脏更加努力地工作,将粘性的血液推向更高的压力,进一步破坏内膜层。在血管树的另一个极端,我们可以看到组织的灌注减少,因为粘稠的血液会冲刷毛细血管的内壁。身体通过增厚毛细血管壁来回应,减少氧气和营养物质在组织中的扩散。这种效应在肾脏、眼睛、手指和脚趾等最为明显,因为健康的毛细血管对不受损害的功能至关重要。

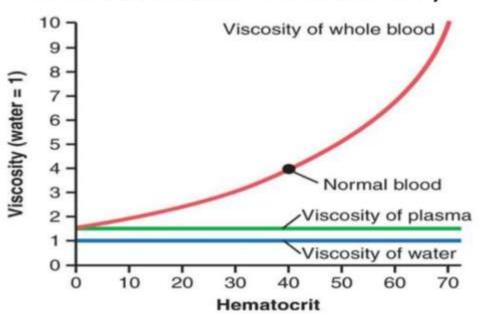
#### Blood Viscosity Explains Plaque Localization

The effects of blood viscosity, taken together with an understanding of the dynamics of blood flow in a closed circulatory system, explain why it is that atherosclerotic plaques are found only in specific locations in the body.1,10 If cholesterol or inflammation was the primary culprit, plaques would be evenly distributed throughout the body because cholesterol and inflammation are generalized rather than localized. Instead, plaques are found in the curves and bifurcations of the large arteries, and they are located in the exact places where blood flow investigations show that turbulence is the greatest. We all have these areas of turbulent blood flow because we share a common geometry of our vascular tree. Yet, not everyone develops artherosclerotic plaques. The difference lies in the viscosity of the blood traveling through those arteries. Cholesterol and inflammation are important because they contribute to blood viscosity.

#### 血粘度解释动脉粥样硬化斑块的定位

血液黏度的影响,以及对闭合循环系统中血流动力学的理解,解释了为什么动脉粥样硬化斑块只存在于身体的特定位置。如果胆固醇或炎症是罪魁祸首,斑块将均匀分布在全身,因为胆固醇和炎症是泛化的而不是局部的。相反,斑块在大动脉的弯曲和分叉处被发现,它们位于血液流动调查显示湍流最大的地方。我们都有这种湍流的血液流,因为我们有共同的血管结构。然而,并不是所有人都发展动脉粥样硬化斑块。不同之处在于流经这些动脉的血液粘度。胆固醇和炎症很重要,因为它们升高血液粘度。

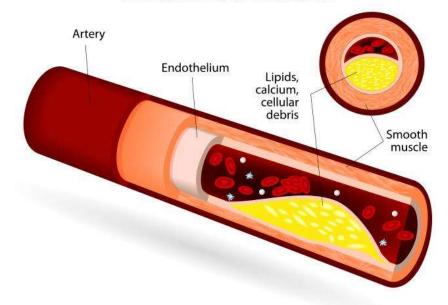
#### Hematocrit and Blood Viscosity



Increased blood viscosity is the only biological parameter that has been linked with all of the other major cardiovascular risk factors, including high blood pressure, elevated LDL cholesterol, low HDL, type-II diabetes, metabolic syndrome, obesity, smoking, age, and male gender.

Blood viscosity is the thickness and stickiness of blood, the resistance to flow. Higher viscosity also cause greater friction against the blood vessel, result in damage of the inner lining of the blood vessel, lead to atherosclerosis.

#### **ATHEROSCLEROSIS**



#### Blood rheology and aging

The flow properties of blood play significant roles in tissue perfusion by contributing to hydrodynamic resistance in blood vessels. These properties are influenced by pathophysiological processes, thereby increasing the clinical relevance of blood rheology information. There is well-established clinical evidence for impaired blood fluidity in humans of advanced age, including enhanced plasma and whole blood viscosity, impaired red blood cell (RBC) deformability and enhanced RBC aggregation. Increased plasma fibrinogen concentration is a common finding in many studies owing to the proinflammatory condition of aged individuals; this finding of increased fibrinogen concentration explains the higher plasma viscosity and RBC aggregation in elderly subjects. Enhanced oxidant stress in advanced age is also known to contribute to altered blood fluidity, with RBC deformability being an important determinant of blood viscosity. Several studies have shown that physical activity may improve the hemorheological picture in elderly subjects, yet well-designed observational and mechanistic studies are required to determine the specific effects of regular exercise on hemorheological parameters in healthy and older individuals.

血液流变学和老化

血液流动特性在组织灌注中起着重要作用,有助于血管的流体动力阻力。这些特性受病理生理过程的影响,从而增加了血液流变学信息的临床意义。目前已经有确凿的临床证据表明,在晚期的人类中,血液流动性受损,包括增高的血浆和全血粘度,血红细胞(红细胞)变形能力和红细胞聚集。在许多研究中,升高的血浆纤维蛋白原浓度是一项常见的发现,原因是年老个体的促炎症条件;这一发现增加了纤维蛋白原浓度,解释了老年受试者中较高的血浆黏度和红细胞聚集。在晚期,增强的氧化应激也有助于改变血液流动,红细胞变形能力是血液黏度的重要决定因素。几项研究表明,体育活动可以改善老年人的血液流变学,但设计良好的观察和机械研究需要确定定期锻炼对健康和老年人的血液流变参数的具体影响。

http://pubmedcentralcanada.ca/pmcc/articles/PMC3796705/

#### Problems Associated With Thick Blood: Artery Damage and Insulin Resistance

The heart has more difficulty pumping viscous blood, and thick blood may be more likely to form clots in arteries and veins. Ralph E. Holsworth, Jr., DO, and Jonathon V. Wright, MD, of the Tahoma Clinic in Washington, believe blood viscosity is behind some damage to the walls of the arteries (the tubes that carry blood from the heart to the rest of the body). Thick blood increases friction against artery walls, potentially causing abrasion, injury, and inflammation. Artery damage raises your risk of heart disease, and it seems to occur in specific arteries close to the heart, which bear the brunt of the force of blood as it's ejected from the heart.

Holsworth and Wright say that the largest blood viscosity study, which followed almost 1,600 middle-aged men for five years, found blood viscosity significantly higher in patients who experienced heart attack or stroke. In fact, the 20 percent of individuals with the highest viscosity had 55 percent of the major heart events.

Viscous blood may also be associated with insulin resistance, a risk factor for type 2 diabetes in middle-aged men and women.

Tips to Keep Your Blood (and Body) Healthy

William A. Tansey, III, MD, a New Jersey-based cardiologist, says blood viscosity apparently increases with **dehydration**. This raises the risk for heart attack and stroke, so it's important to keep well hydrated, especially in hot weather. In addition, you can keep your blood (and your body) healthy by:

Not smoking Eating a healthy diet Exercising regularly Minimizing stress

https://www.qualityhealth.com/heart-articles/thick-blood-what-risks

#### Problems Associated With Thick Blood: Artery Damage and Insulin Resistance

与粘稠血有关的问题:动脉损伤和胰岛素抵抗

心脏泵出粘性血液更吃力,而粘性好的血可能更容易形成动脉和静脉血栓。拉尔夫·e·霍尔斯沃斯(Ralph e . Holsworth,Jr .)和华盛顿Tahoma诊所的医学博士乔纳森·v·赖特(Jonathon v . Wright)认为,血液黏稠度是动脉壁受损的原因。粗粘稠的血液会增加与动脉壁的摩擦,可能导致磨损、损伤和炎症。动脉损伤会增加你患心脏病的风险,而且它似乎发生在靠近心脏的特定动脉,当血液从心脏弹出时,它会受到血液的冲击。

霍尔斯沃斯和怀特说,最大的血液粘度研究发现,在经历过心脏病或中风的患者中,血液黏度明显更高。该研究跟踪了近1600名中年男性5年。事实上,百分之二十血粘度最高的人有发生主要心血管意外的机会高达55%。

粘性血液也可能与胰岛素抵抗有关,这是中年男性和女性患2型糖尿病的危险因素。

#### 保持你的血液(和身体)健康的建议

威廉·a·坦西(William a . Tansey)是一名新泽西心脏病专家,他说血液的黏度明显随着脱水而增加。这增加了心脏病和中风的风险,所以保持良好的水分是很重要的,尤其是在炎热的天气。

此外, 你可以保持你的血液(和你的身体)健康。

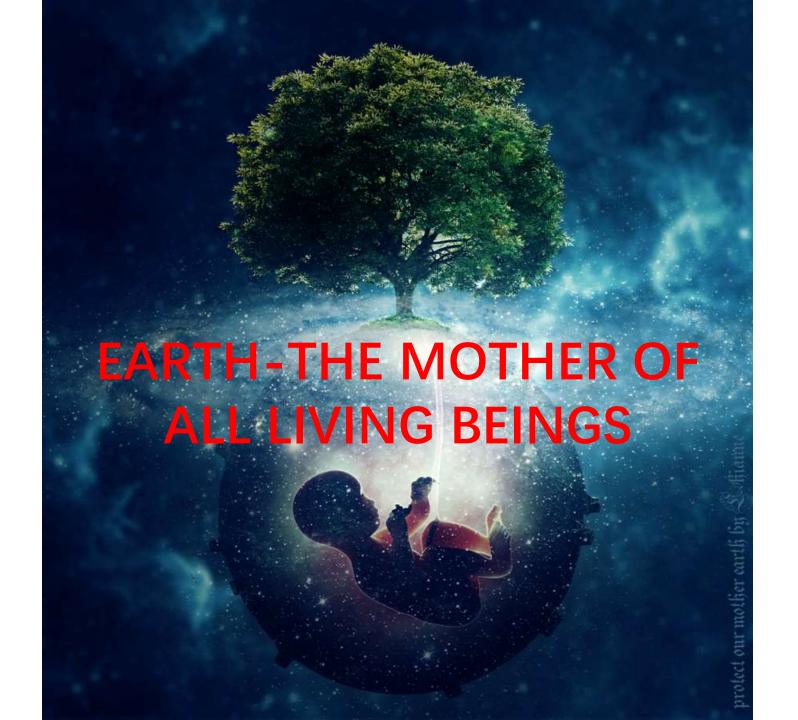
不吸烟

吃健康的食物

定期锻炼

减少压力

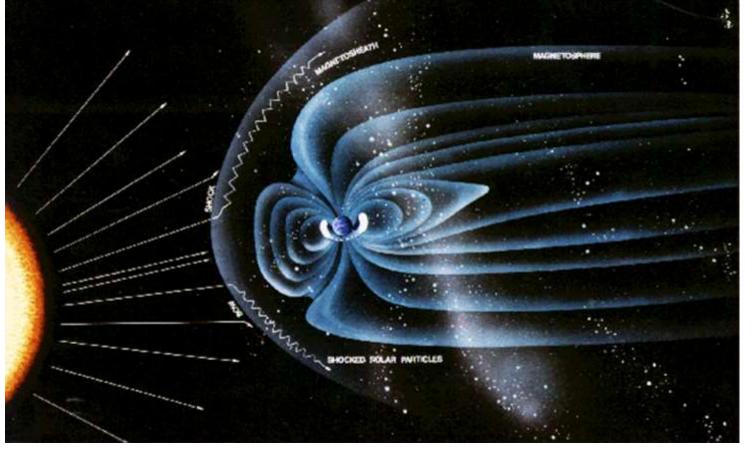
https://www.qualityhealth.com/heart-articles/thick-blood-what-risks



# The Earth's Vibrating Frequency, Earth Breathing is 7.83Hz ... the background standing wave of all living beings...



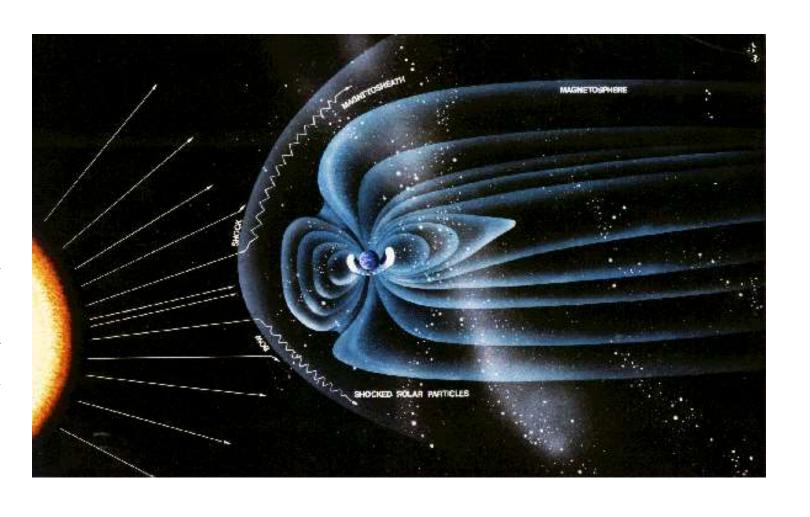
Earth's magnetic field allows all life to exist as we know it today



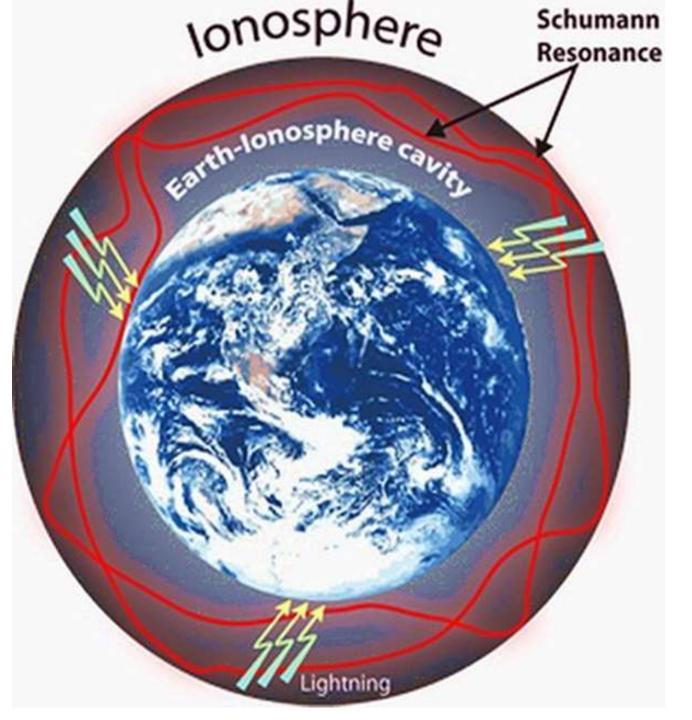
Without our magnetic field Earth would be much like Mars, the magnetic field extends into outer space beyond our atmosphere and deflects high energy particles emitted by the sun. If these high- energy particles were not deflected they would strip Earth's atmosphere, all the oceans would evaporate into space, it would get very cold below freezing, and destroy all life as we know it.

## 地球磁场使保护 自己免受太阳辐 射危害的"盾牌"

因为地球的磁场使得我们今天所知道的一切生命的存在。如果没有自我保护的磁场,地球就像火星一样,磁场延伸到大气层以外的外太空,并偏转由太阳发出的高能粒子。



如果这些高能粒子没有偏离地球大气层,所有的海洋将会蒸发到太空中,地球会在冰点下变得非常冷,并摧毁我们所知道的所有生命。

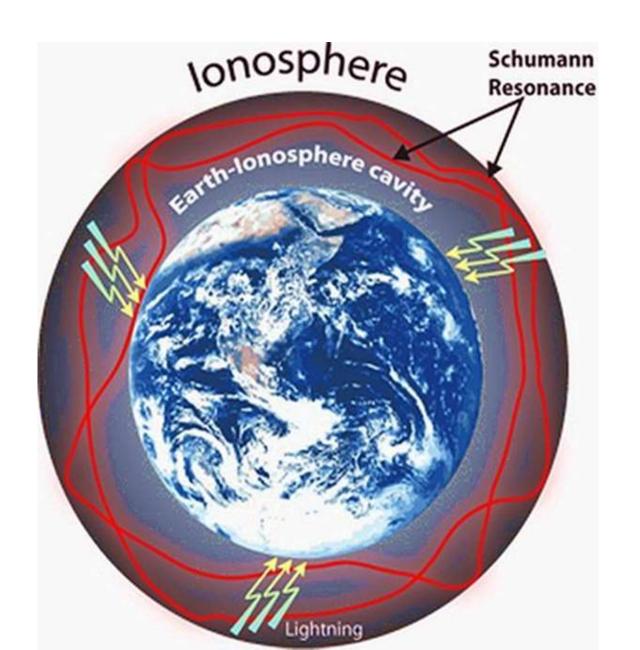


At any given moment about 2,000 thunderstorms roll over Earth, producing some 50 flashes of lightning every second.

Each lightning burst creates electromagnetic waves that begin to circle around Earth captured between Earth's surface and a boundary about 60 miles up.

Some of the waves - if they have just the right wavelength - combine, increasing in strength, to create a repeating atmospheric heartbeat known as **Schumann resonance**. This resonance provides a useful tool to analyze Earth's weather, its electric environment, and to even help determine what types of atoms and molecules exist in Earth's atmosphere.

#### 舒曼共振-存在于大气层的地球"心跳"



在任何时刻,大约2000次雷暴在地球上翻滚,每秒产生大约50次闪电。

每一次闪电都会产生电磁波,在 地球表面和60英里以上的边界之 间环绕地球。

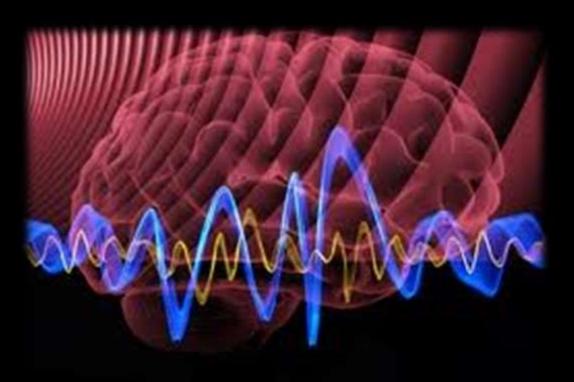
一些波——如果它们有合适的波长——结合,增强强度,创造出一种重复的大气心跳,称为舒曼共振。

这种共振提供了一个有用的工具来分析地球的天气,它的电力环境,甚至有助于确定地球大气层中存在的原子和分子类型。

#### Schumann Resonance is Earth Heartbeat



Schumann resonance is not merely an important phenomenon caused by lightning in the atmosphere It is a very significant electromagnetic standing wave, acting as the background frequency and influencing biological oscillators within the mammalian brain



Mohsen Paul Sarfarazi, Ph.D.

#### Schumann Resonance

- Heart Beat of Mother Earth (measured in hz hertz)
- Electro-magnetic wave-lengths per second (hz)
- Generated by lightning discharges in Earth's cavity (Earths Surface & Ionosphere)
- Act like a Tuning Fork to planet Earth
- Earth / Life Forms entrain with the Schumann Resonance
- 7.83 hz for thousands of years (natural resting Earth Heartbeat)
- Since the 1980s Schumann Resonance been increasing in hz
- 12 hz = effective 16 Hour day
- Earth's Hz Heart Beat (Schumann Resonance) now fluctuates up to 50hz
- Schumann Resonance & Earth's Magnetic Field INVERSE Relationship –
   Thus as the Schumann Resonance increases, Magnetic Field decreases

#### **HOW DOES MRET ACTIVATION OCCUR?**

#### The MRET emulate Nature's process to create the spring water.

The water-activating device used in Molecular Resonance Effect Technology (MRET) is made of a polar polymer compound mixed with certain amounts of pharmacologically active organic and inorganic substances. During the activation process, the MRET polymer compound is placed within an externally generated distinct electromagnetic field. Particularly the MRET polymer compound is exposed to a homogenous magnetic field and oscillating optical light with a wavelength of 600-700 nanometres and a frequency of 7.8 Hertz. As a result the MRET compound generates very subtle, low frequency electromagnetic oscillations similar to those healthy geomagnetic fields found in specific areas on Earth such as the Caucasus Mountains in Russia or the Tibetan Mountains in Asia where the waters have been shown to provide dynamic changes to physiological function.

#### MRET活化如何发生?

低频共振仿照大自然产生矿泉水的过程。

在分子共振效应技术(MRET)中使用的水激活装置是由一种由一定数量的药物活性的有机和无机物质混合而成的极性高分子化合物构成的。在活化过程中,MRET聚合物化合物被放置在一个外部产生的独特电磁场中。MRET聚合物复合暴露在一个均匀的和波长600-700纳米的可见光和频率7.83赫兹的磁场. 结果MRET 化合物生成非常微妙的低频电磁振荡,类似在地球上特定领域如俄罗斯的高加索山脉或亚洲的西藏山脉发现的健康地理磁场,那里的水域已被证明给水的生理功能提供了动态变化。



## MRET Activated Water and its Successful Application for Prevention Treatment and Enhanced Tumor Resistance in Oncology

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 research regarding the physical parameters of water confirmed that MRET treatment of distilled water leaded to substantial modification of basic physical-molecular properties of water. The anomalous viscosity of MRET water (subject to very low tangent pressure) and electrodynamic characteristics of MRET water (subject to applied electromagnetic field of low frequency range) confirm the high level of long-range dynamic structuring of water molecules in polarized-oriented multilayer formations in activated water produced with the help of MRET activation process.

The similarity of molecular formations of cell water and MRET activated water contributes to their compatibility, easy bio-availability and assimilation of MRET activated water in biological systems. The introduction of MRET water to biological systems can contribute to the enhancement of the cellular transduction mechanism and the proper function of cells in biological systems. The significant positive effect of MRET Activated Water regarding the tumor resistance on animals was observed in all groups of mice on different fractions of MRET water in the experiments conducted on 500 mice at Kiev Institute of Experimental Pathology, Oncology and Radiobiology, Ukrainian Academy of Science. The best results were observed in the groups of mice on MRET water activated for 30 minutes (optimal regime of activation). The significant anti- tumor effect of MRET Activated Water on mice was close to the action of the chemotherapy agents and allowed to avoid the side effects that typically follow chemotherapy treatment in oncology. MRET Activated Water and its Successful Application for Prevention Treatment and Enhanced Tumor Resistance in Oncology (PDF Download Available). Available from:

https://www.researchgate.net/publication/237446023\_MRET\_Activated\_Water\_and\_its\_Successful\_Application\_for\_Prevention Treatment and Enhanced Tumor Resistance in Oncology [accessed Jun 28, 2017].

#### MRET活化水及其在肿瘤防治上的成功应用,增强抗肿瘤能力

这篇文章涉及一种基本性质,即**MRET活化水的分子结构,物理和电动力学特性**可以增强活细胞的特定分子机制。 水的物理参数的研究证实,蒸馏水的MRET处理对水的基本物理分子性质进行了实质性的修改。MRET活化水的极低 粘度(受非常低切压力处理)和MRET活化水的电动力的特点(受极低频电磁场的处理)证实了借助MRET活化过程,在活 性水中,水分子高水平的长链动态,极化导向的多层构造。

confirm the high level of long-range dynamic structuring of water molecules in polarized-oriented multilayer formations in activated water

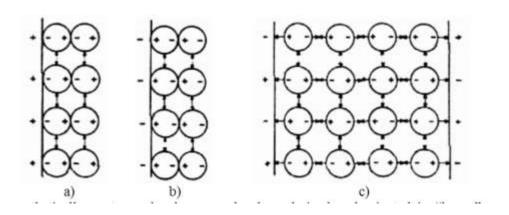
细胞内水(生物水)的分子结构和MRET活化水分子结构的相似性有助于生物系统中MRET活化水的相容性、易生物利用性和同化作用。在生物系统中引入MRET水可以促进细胞转导机制的增强和细胞在生物系统中的正常功能。在基辅实验病理学研究所、乌克兰科学院肿瘤学和放射生物学研究所的500只小鼠身上,观察了MRET活性水对动物肿瘤抗性的显著正效应。观察组小鼠MRET水活化时间为30分钟(激活最佳状态)。MRET活化水对小鼠的显著抗肿瘤作用与化疗药物的作用密切,并可避免肿瘤化疗治疗的副作用。

https://www.researchgate.net/publication/237446023\_MRET\_Activated\_Water\_and\_its\_Succesful\_Application\_for\_Prevention\_Treatment\_and\_Enhanced\_Tumor\_Resistance\_in\_Oncology [accessed Jun 28, 2017].

# The polarized-oriented multilayer molecular structuring of MRET water is similar to the structured water found in healthy cells.

The suggested model of polarized-oriented multilayer structuring of cell water due to the interaction of water dipoles with pervasive matrix of fully-extended proteins constitutes the basis for the cellular transduction mechanism. Based on this scientific approach the similarity of molecular formations of cell water and MRET activated water can contribute to their compatibility, easy bioavailability and assimilation of MRET activated water, as well as to the enhancement of cellular functions in biological systems.

由于水偶极子与全扩展蛋白基质的相互作用,极化导向的多层细胞水结构,构成了细胞转导机制的基础。基于这一科学方法,细胞水分子结构和MRET活化水分子结构的相似性可以促进MRET活化水的相容性、易生性和同化,以及生物系统中细胞功能的增强。



#### MRET activated water has decreased electrical conductivity and dielectric permittivity

The significant modification of electrodynamic characteristics of distilled water subject to applied electromagnetic field in the range of low frequencies was observed after MRET activation. The electrical conductivity of MRET activated water at 20°C in the range of frequencies of 0.1 Hz – 100 kHz decreased by 80 – 90% in 30 minutes activated water, and by 66 – 70% in 60 minutes activated water respectively compare to non-activated distilled water. The dielectric permittivity in the very low frequencies range of 0.1 - 1000 Hz decreased by 80 - 90% and in the range of frequencies of 1 - 100 kHz it decreased by 18% in 30 minutes activated water; the decrease by 70 - 85% was observed in the range of 0.1 - 1000 Hz in 60 minutes activated water compare to non-activated water from the same source. It is reasonable to admit that in the range of very low frequencies 0.1 – 1000 Hz the long-range multilayer molecular structures of MRET water (with high level of molecular coupling inside the "layers" and extremely low level of hydrogen bonding between the "layers" ) create lower level of resistance of water dipoles to the alignment and, as a result, the dielectric permittivity of MRET water is substantially lower by 70 – 90% compare to non-activated water. This substantial decrease of dielectric permittivity also confirms the direct correlation between viscosity and dielectric permittivity of water in the range of low frequencies of applied EMF [Chaplin 2005].

在MRET活化后,观察了在低频率范围内应用电磁场对蒸馏水的电动力特性的重大修正。在30分钟内激活的水MRET活化水的电导率在20℃ 0.1 Hz - 100 kHz的频率范围减少了80 - 90%, 和在60分钟内激活水减少66 - 70%, 分别比较非活性蒸馏水。低频率范围0.1 - 1000hz的介电常数降低了80 - 90%, 在1 - 100 kHz的频率范围内, 30分钟的激活水减少了18%;在0.1 - 1000hz范围内, 在60分钟的时间内, 与来自同一来源的非活性水相比, 下降了70 - 85%。合理的承认,在很低的频率范围0.1 - 1000 Hz状态水的远程多层分子结构(与高水平的分子耦合在"层"之间的氢键和极低水平"层")创建低水平耐水偶极子的定位,因此,介电常数显著降低状态水的70 - 90%比较非活性水。电介质介电常数的大幅下降也证实了在应用电动势的低频范围内, 水的粘度与介电常数之间的直接关系。

# MRET activated water has anomalously low viscosity- the reason for its quick hydration and blood thinning effect

The anomalous electrodynamic characteristics and viscosity of MRET Activated water provide some evidence regarding the possible effect of MRET water on the proper function of cells in biological systems. It is well known that cellular processes in biological systems are driven by the low energy of bio-chemical reactions inside and between the cells and cellular structures. Consequently, such processes create subtle low frequency electromagnetic field and low tangent pressures along water surfaces and the membranes between the cells. The anomalously low viscosity, dielectric permittivity and electrical conductivity of MRET water in the range of very low frequencies that exists in biological systems can contribute to the enhancement of the cellular transduction mechanism and result in improved intracellular/extracellular water exchange and the proper function of cells in biological systems.

MRET活化水的异常电动力特性和粘度提供了一些关于MRET水对生物系统细胞正常功能的影响的证据。众所周知,生物系统中的细胞过程是由细胞和细胞结构内部和之间的生物化学反应的低能量驱动的。因此,这些过程会在水表面和细胞膜之间产生微妙的低频电磁场和低切线压力。

MRET水的异常低粘度、低介电常数和低电导率和接近于存在于生物系统的极低频率、可以增强细胞传导机制,导致生物系统细胞内/细胞外水交换和细胞功能的提高。

#### MRET activated water enhances cellular hydration by 3 times

The enhancement of the human body hydration was confirmed by Bioelectric Impedance Test conducted on eight human subjects at Global Quantech, Inc., USA with the help of FDA approved Bioelectric Impedance instrumentation, model Imp SFB7 and the following application of multifrequency bioelectric impedance analysis. The experiment showed 3 times increase of the rate of intracellular/extracellular water exchange: the water exchange took 20 minutes after the ingestion of MRET activated water by human subjects compare to the 60 minutes in case of the ingestion of nonactivated water by the same human subjects. Taking into consideration the ability of MRET water to enhance morphology of human blood cells and to suppress mutated cells in vitro [Smirnov 2006-2, 2006-1, 2003], high germicidal activity of MRET water, the inhibition of growth of kaluss tissue (mutated cells of botanical origin) in MRET water (Pic 1) already confirmed by previous researches [Vysotskii 2006], the goal of this investigation was to study the effects of different fractions of MRET water on mutated cells in tumors and on the cells of immune system in vivo. As a result of this investigation the significant positive effect of MRET Activated water on the development of tumor resistance in animals was observed in the experiments conducted on 500 mice (22 groups with 20 mice in each group and 10 groups with 5 mice in each group).

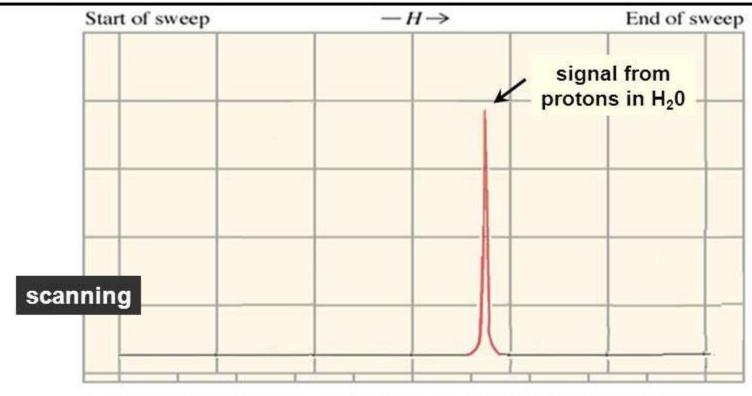
在美国食品及药物管理局(FDA)批准的生物电阻抗仪器、模型Imp SFB7和多频生物阻抗分析的应用中,生物电阻抗测试证实了人体水合作用的增强。

实验显示细胞内或细胞外的水交换速率增加3倍:在相同的实验人群,对比非活化水的60分钟,MRET活化水的吸收发生在喝水后的20分钟。考虑到MRET活化水对增强人类血液细胞的形态和在体外抑制突变细胞的能力,之前已经证实的MRET活化水的高杀菌力,抑制KALUSS组织的生长(植物源性突变细胞),这次调查的目的是研究不同分数的MRET活化水对肿瘤突变细胞和体内免疫细胞的影响。本研究在500只小鼠的实验中(每组20只小鼠22组,每组5只小鼠10组),发现MRET活性水到对动物肿瘤抗性发展的显著正效应。

NMR is also used to determine the size of water clusters.

The vitalized water provided by quantum water revitalizer has the smallest water cluster.

## <sup>1</sup>H NMR Spectrum – H<sub>2</sub>O



A sample of water is placed in an NMR instrument, and a proton spectrum is recorded (scanned from left to right).

An NMR signal appears. This proves that water contains hydrogen atoms!

**Pic 1**: The effect of MRET water (30 minutes and 60 minutes of activation) on the growth and development of kaluss tissue (mutated cells of botanical origin).



在美国食品及药物管理局(FDA)批准的生物电阻抗仪器、模型Imp SFB7和多频生物阻抗分析的应用中,生物电阻抗测试证实了人体水合作用的增强。

实验显示细胞内或细胞外的水交换速率增加3倍:在相同的实验人群,对比非活化水的60分钟,MRET的吸收发生在喝水后的20分钟。考虑到MRET活化水对增强人类血液细胞的形态和在体外抑制突变细胞的能力,之前已经证实的MRET活化水的高杀菌力,抑制KALUSS组织的生长(植物源性突变细胞),这次调查的目的是研究不同分数的MRET活化水对肿瘤突变细胞和体内免疫细胞的影响。本研究在500只小鼠的实验中(每组20只小鼠22组,每组5只小鼠10组),发现MRET活性水到对动物肿瘤抗性发展的显著正效应。

### MRET activated water strengthens cancer-killing NK cells

The purpose of this investigation was to evaluate optimal regimes of MRET water activation and the regime of application of activated water in order to maximize the stimulation of NK-cells cytotoxic activity. In the first stage of the research mice of experimental groups received activated water during different periods of time. Mice of "preventive treatment" groups received different fractions of MRET activated water for 21 days, and mice from "therapeutic treatment" groups received it for 14 days. After the treatment with activated water mononuclear lymphocyte fractions containing NK-cells were isolated from spleens of mice of experimental groups. In the second stage cytotoxic activity of NK-cells incubated with tumor target cells obtained from peritoneal cavities of mice transplanted with ascitic Ehrlich carcinoma was studied. The incubation was conducted for 18 hours at 37°C in humidified atmosphere with 5% CO2 and then the micro plates were gently centrifuged during 5 minutes

本研究的目的是评估MRET水活化的最佳机制和活化水的应用机制,以最大程度地刺激NK细胞的细胞毒性活动。在实验研究的第一阶段,实验组小鼠在不同的时间内获得了活性水。"预防性治疗"组的小鼠在21天内接受了不同比例的MRET活化水,"治疗性治疗"组的小鼠接受了14天的治疗。用活性水单核细胞分离出含有NK细胞的淋巴细胞,与实验组小鼠的spleens分离。在第二阶段中,研究了从小鼠腹膜腔中提取的肿瘤靶细胞中NK细胞的细胞毒性活性。孵化了18小时37°C调湿大气中5%的二氧化碳,然后微板块中轻轻离心5分钟.

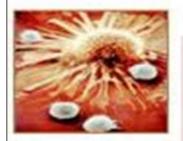
#### MRET activated water has anti-cancer properties by strengthening the NK cells

Results The experimental results confirm that consumption of all types of MRET activated water leads to the significant inhibition of tumor growth observed in mice with transplanted tumors. The best results were observed in the groups of mice on MRET water activated for 30 minutes (optimal regime of activation).

The substantial anti-tumor efficacy was confirmed by very high level of reduction of Total Number of Viable Tumor Cells which is comprised of two processes: diminishing volume of ascitic fluid in peritoneal cavity of tumor-bearing mice (by 50% for animals in "preventive treatment" group) and decrease of the number of viable tumor cells per unit of tumor tissue (by 52% in the same group).

The resulting decrease of the Total Number of Viable Tumor Cells was 76%. The viable tumor cells were determined by Trypan blue exclusion test: the uncolored cells were considered as viable. The test results show the dual mechanism of MRET water effect on tumors: the prevention and reduction of volume of tumors together with the inhibition of viable tumor cells. Approximately the same level of efficacy was observed in other groups (water activated for 15 and 45 minutes) with "preventive treatment" regime of application of activated water. The application of MRET water in "therapeutic treatment" regime was less effective with the similar tendency in dependency of the level of anti-tumor efficacy on the activation time. The reduction of Total Number of Viable Tumor Cells by 55% was observed for the optimal 30 minutes activated water. It is important to note that the long-term preservation of activated water for 45 days decreased its anti-tumor efficacy but left it on the significantly high level compare to other fractions and non-activated water. Thus, this investigation confirms that MRET activated water is efficient anti-tumor agent. The results of experimental measurements of Average Total Number of Viable Tumor Cells of ascitic Ehrlich carcinoma are presented on Fig 2.

### Natural Killer (NK) Cells



#### Why Are NK Cells so important?

They target:

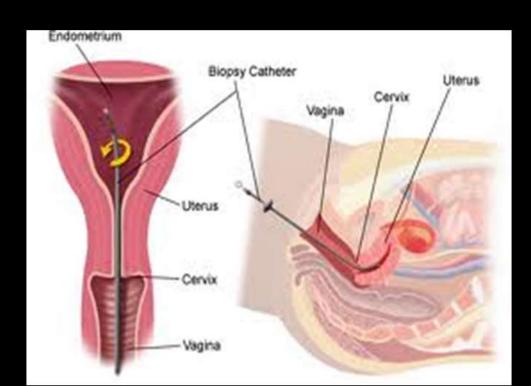
TUMOR CELLS CANCER CELLS INFECTED CELLS

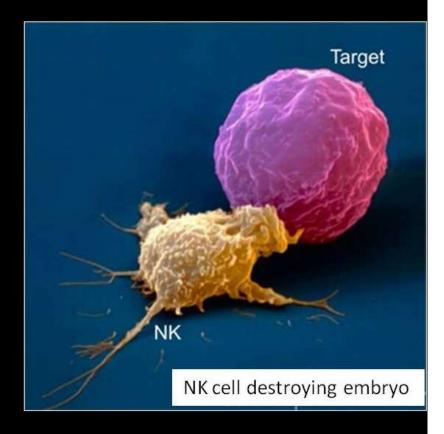


The protect against a wide variety of

#### INFECTIOUS MICROBES

(viruses, bacteria, parasites & fungi)





## Natural Killer (NK) Cells

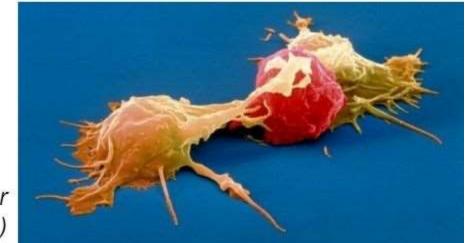
10 – 15% of circulating lymphocytes

Not immunologically specific ⇒ part of \_\_\_\_\_

Kill target cell if MHC-I absent, e.g.:

- 1. Some transformed cells
- 2. Some virus infected cells, esp. early infection stage
- 3. Large extracellular parasites

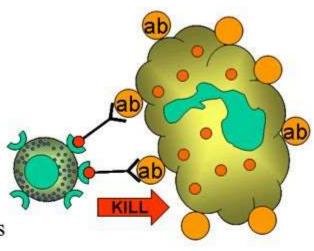
Similar mechanism to CTLs: Pore formation, then apoptosis or lysis



Colored SEM; NK cells attacking a cancer cell. (Karolinska Institute)

#### Natural killer cells (NK cells)

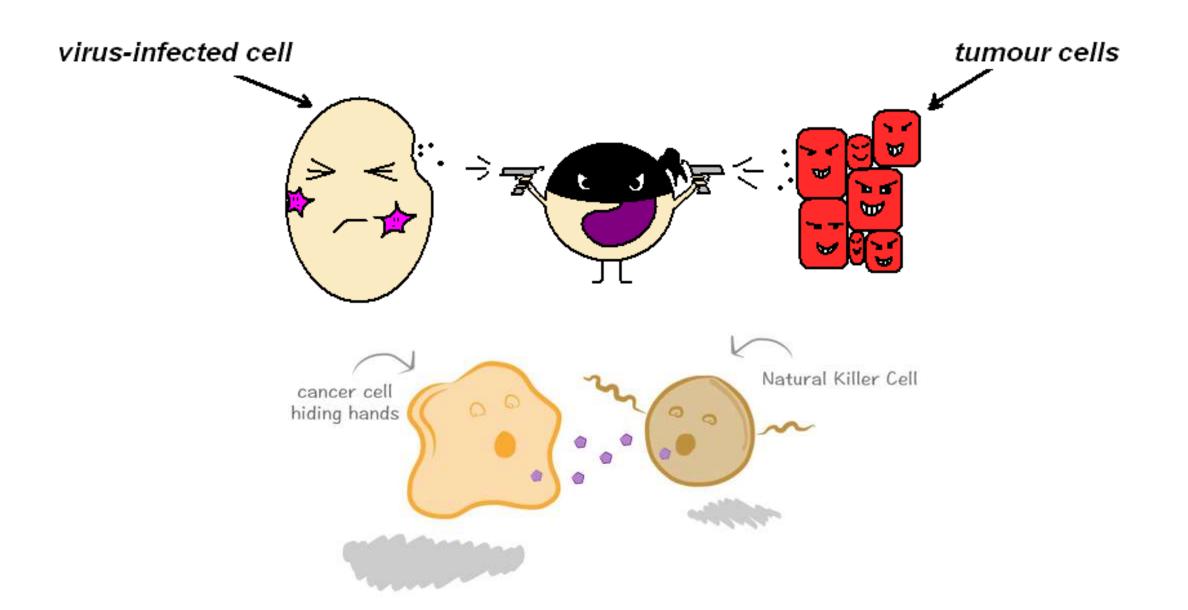
- instead of attacking the invaders, they attack the body's own cells that have become infected by viruses
- they also attack potential <u>cancer cells</u>, often <u>before</u> they form tumors
- they bind to cells using an antibody "bridge", then
  kill it by secreting a chemical (perforin) that makes
  holes in the cell membrane of the target cell. With
  enough holes, the cell will die, because water
  rushing inside the cell will induce osmotic
  swelling, and an influx of calcium may trigger
  apoptosis.

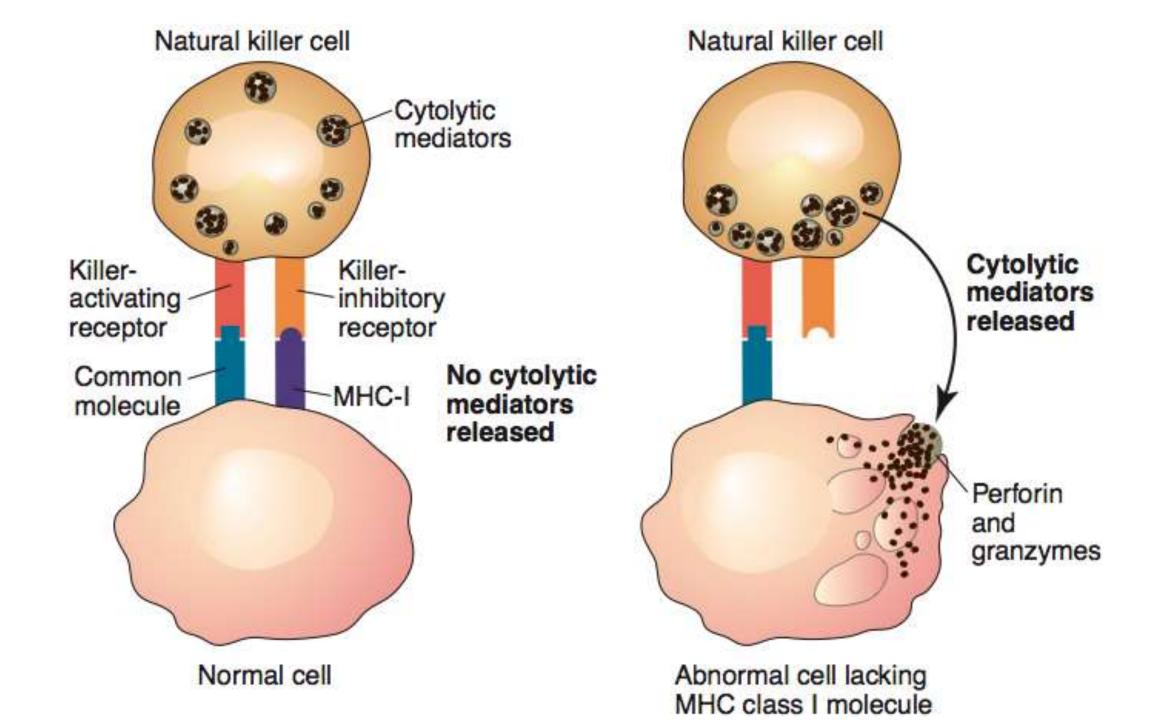


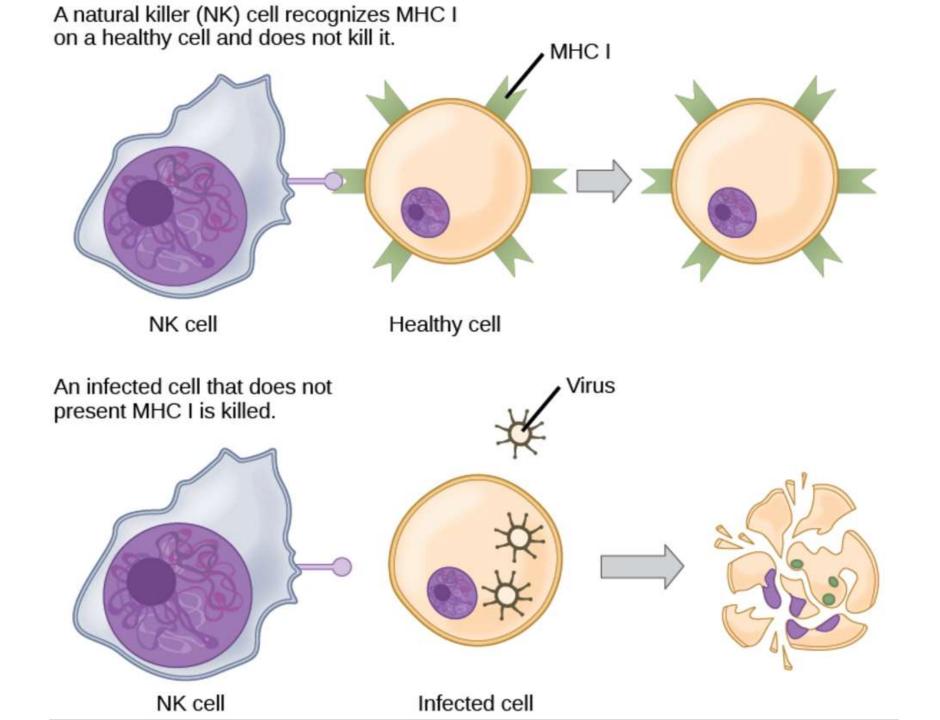
NK cell

Target cell

## I AM A NK CELL-A SUPER KILLER

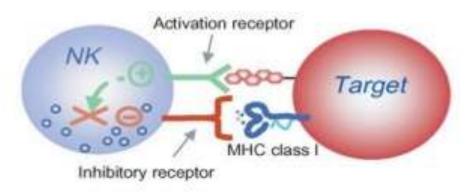


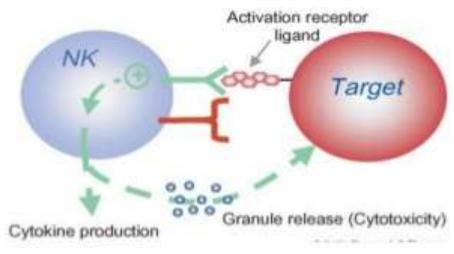


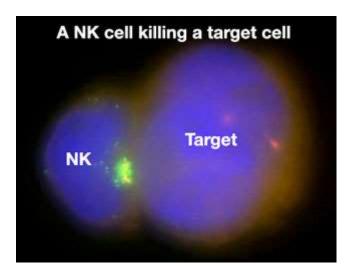


## Natural killer (NK) cells

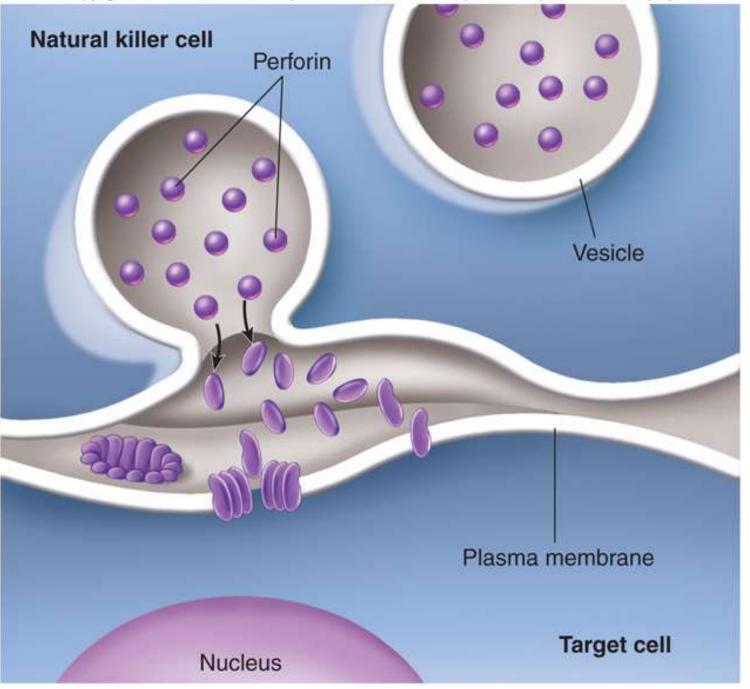
- Natural killer (NK) cells use the same effectors to kill virusinfected cells and tumors.
- Do not require stimulation, nor do they exhibit memory.
- NK cells respond in the absence of MHC proteins.

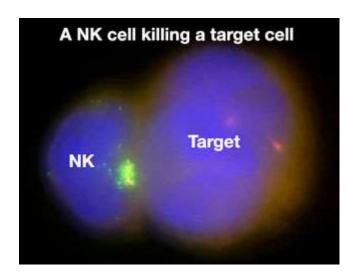


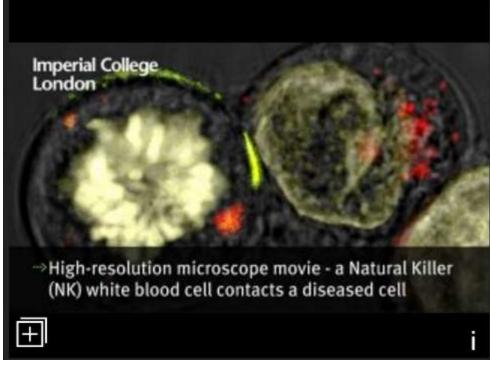


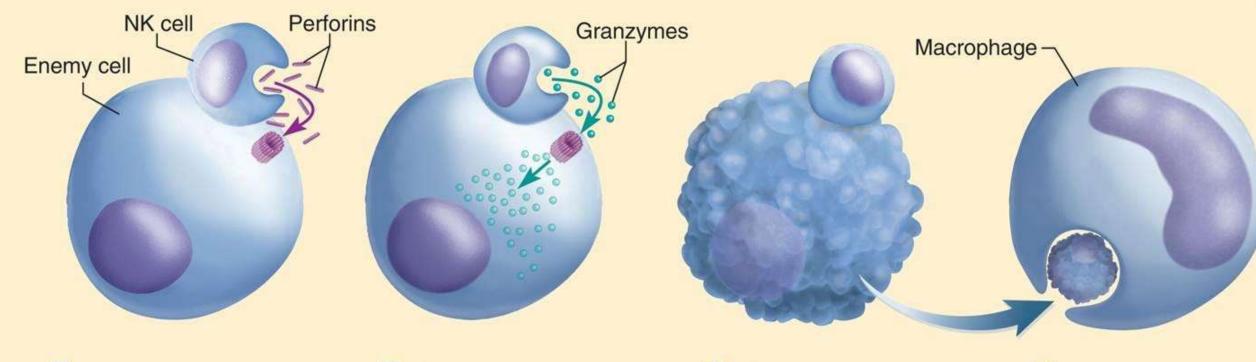


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1 NK cell releases perforins, which polymerize and form a hole in the enemy cell membrane.

2 Granzymes from NK cell enter perforin hole and degrade enemy cell enzymes.

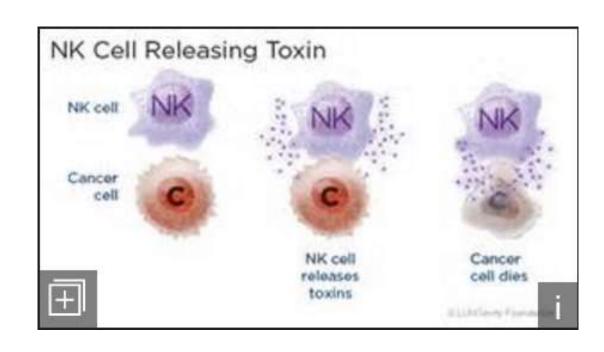
3 Enemy cell dies by apoptosis. Macrophage engulfs and digests dying cell.

# MRET activated water has anti-cancer properties by strengthening the NK cells 量子低频共振水通过增强NK细胞活力有抗癌作用

**实验结果证实,所有类型的MRET活化水均能显著抑制移植瘤小鼠肿瘤生长。**观察组小鼠MRET水活化时间为30分钟 (激活最佳状态)。通过二个过程:减少腹腔肿瘤小鼠腹水的体积(50%为动物预防治疗组),减少每单位肿瘤组织存活的肿瘤细胞数,证实了实质的抗肿瘤功效。可存活肿瘤细胞总数的减少为76%。

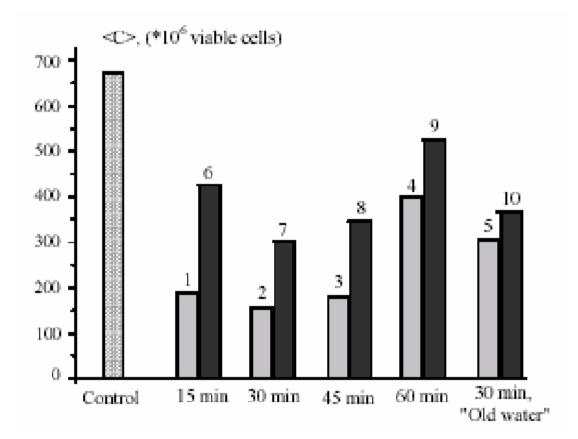
通过Trypan蓝色排斥试验确定存活的肿瘤细胞:未着色细胞被认为是存活的。测试结果显示MRET水对肿瘤的双重作用:预防肿瘤体积的和减少,以及对肿瘤细胞的抑制作用。在其他组(15 - 45分钟的水激活)和活化水应用的"预防性治疗"机制中观察到大约相同的功效水平。

MRET水在"治疗性治疗"中的应用效果较差,在激活时间上与抗肿瘤疗效的相关性有相似的倾向。在最理想的30分钟激活水的条件下,观察到可存活肿瘤细胞总数的减少55%。值得注意的是,45天的长期活性水的保存降低了它的抗肿瘤功效,但与其他处理时间和非活性水相比,它仍处于显著的高水平。因此,本研究证实,MRET活性水是有效的抗肿瘤药物。在图2中显示了ascitic Ehrlich癌细胞存活肿瘤细胞的平均总数量的实验结果。



# MRET activated water has anti-cancer properties by strengthening the NK cells 量子低频共振水通过增强NK细胞活力有抗癌作用

**Figure 2:** The effect of preventive (1–5) and therapeutic (6–10) application of MRET activated water on average total number of viable cells <C> in an ascetic tumor, obtained from mice inoculated intraperitoneally with tumor cells of Ehrlich carcinoma.



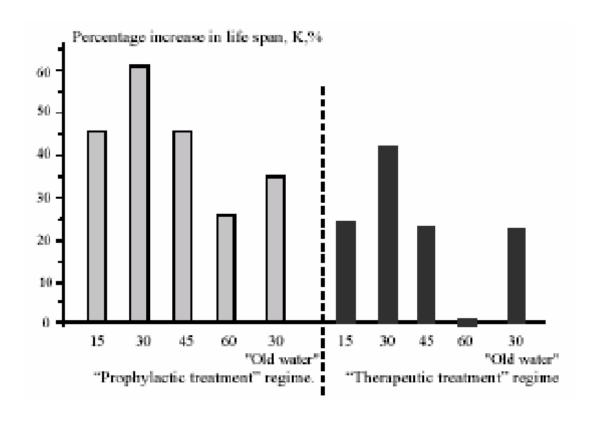
# MRET activated water has anti-cancer properties by strengthening the NK cells 量子低频共振水通过增强NK细胞活力有抗癌作用

The survival of the investigated animals was daily monitored in order to study the effect of different activated water fractions on dynamic and survival indices of tumor-bearing mice. The data of the dependence of changes of life span of tumor-bearing mice for both application regimes and all types of activated water are presented on Fig 3. It shows that the consumption of MRET Activated water substantially increased survival of tumor-bearing animals. The increase of life span was observed in all groups of mice except "therapeutic treatment" group on water activated for 60 minutes. Water activated for 30 minutes (optimal regime of activation) produced the most significant effect on survival of mice with transplanted tumors. The life span of mice which received optimal activated water in "preventive treatment" regime increased by 61%. Significant increase in life span (about 581 Igor Smirnov 45%) was also observed when mice were treated with MRET activated water (activation time 15 minutes, and 45 minutes) in "preventive treatment" regime. The increase of life span by 43% was observed in "therapeutic treatment" regime for the optimal 30 minutes activated water.

为了研究不同活化时间对肿瘤小鼠动态和生存指数的影响,对研究动物的生存进行了日常监测。图3给出了应用系统和所有类型的活化水对肿瘤小鼠寿命变化的依赖性数据。研究表明,MRET活性水的消耗大大增加了肿瘤动物的生存。除60分钟活化水处理的"治疗性治疗"组外,所有小鼠组均观察到延长生命,。水活化30分钟(最佳激活机制)对移植瘤小鼠的生存产生最显著的影响。在"预防性治疗"中获得最佳活性水的小鼠寿命增加了61%。在"预防性治疗"机制中,用MRET活性水(激活时间15分钟,45分钟)治疗小鼠,也观察到生命周期的显著增加45%。在"治疗性治疗"方案中,观察到30分钟活性水的"治疗性治疗",其寿命延长了43%。

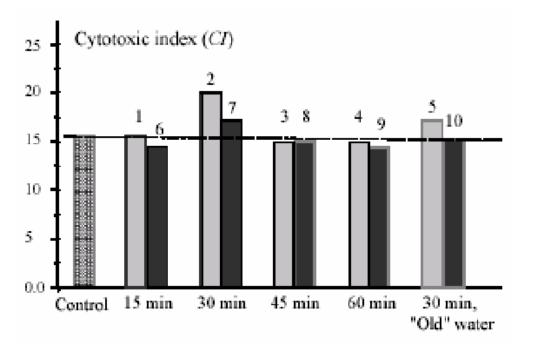
接种了艾氏腹水瘤细胞的老鼠,接受不同处理的MRET活化水,在"预防治疗"和"治疗性治疗"治疗方案的增加寿命的百分比

**Figure 3:** The change of the percentage increase of life span of tumor-bearing mice with ascitic Ehrlich carcinoma which received different types of MRET activated water in "preventive treatment" and "therapeutic treatment" regimes. The digits under the charts correspond with the duration of water activation in minutes.



The similar investigation conducted on mice with transplanted ascitic sarcoma revealed similar tendencies in the efficacy of MRET water as anti-tumor agent with the best results on optimal 30 minutes activated water. The effect of application of different fractions of MRET activated water on the development of cytotoxic activity of spleen mononuclear lymphocytes with NK-cells is shown on Fig 4. The increase of cytotoxic index in both regimes (21 days and 14 days of application of activated water for mice without tumors) by 26% and 10% respectively was observed only in the groups of mice under MRET water activated for 30 minutes. The cytotoxic index also increased in the group of mice under "old" 30 minutes activated water in "preventive" regime (21 days of MRET water application). No significant changes in cytotoxic index were observed for other water fractions.

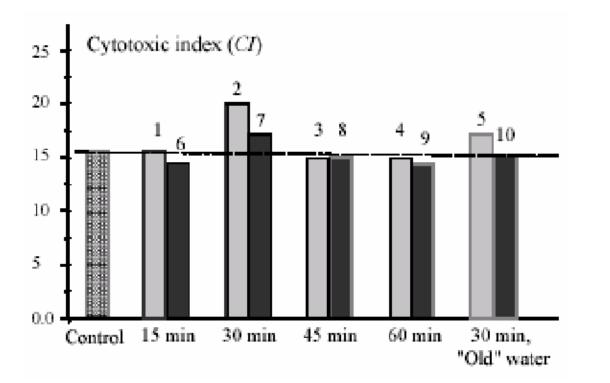
**Figure 4:** The effect of MRET activated water on cytotoxic activity of lymphocytes containing NK-cells. Activated water was applied for mice without tumors in two regimes (for 21 and 14 days), called "preventive" (1–5) and "therapeutic" (6–10).



MRET activated water has anti-cancer properties by strengthening the NK cells 量子低频共振水通过增强 NK细胞活力有抗癌作用

对移植腹水的小鼠进行了类似的研究,发现MRET水作为抗肿瘤药的效果与最佳的30分钟活性水的效果相似。不同处理时间的MRET活化水对含NK细胞的脾脏单核淋巴细胞的细胞毒性活性的影响如图4所示。在两种情况下(21天14天,无肿瘤小鼠激活水的应用)中细胞毒指数分别增加了26%和10%,只在MRET水中激活了30分钟的小鼠组中观察到。在"老"30分钟的"预防"方案(MRET水应用的21天)中,小鼠组的细胞毒性指数也增加了。其他水处理时间的细胞毒性指数没有明显的变化。

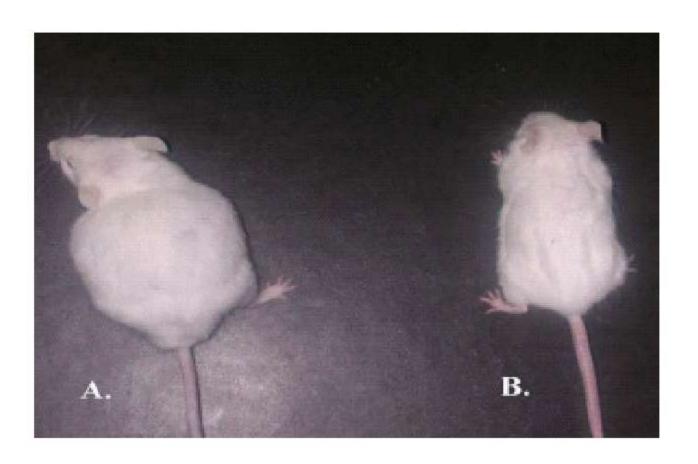
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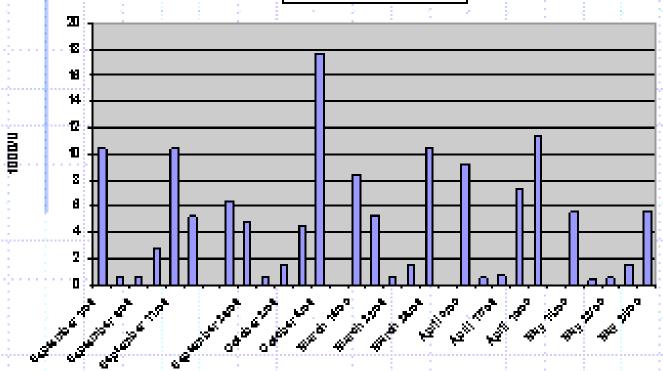
在接种艾氏腹水瘤细胞后的第十八天外形对照 A. 对照组小鼠 B. "预防性治疗"方案组(最佳活化时间 30分钟)

**Pic 2:** The appearance of mice from "control" (A) and "preventive treatment" groups (optimal activation time 30 minutes) (B) on the 18th day after ascitic Ehrlich carcinoma cell inoculation.



White Blood Cell Counts (reference range 4.0-10.8).





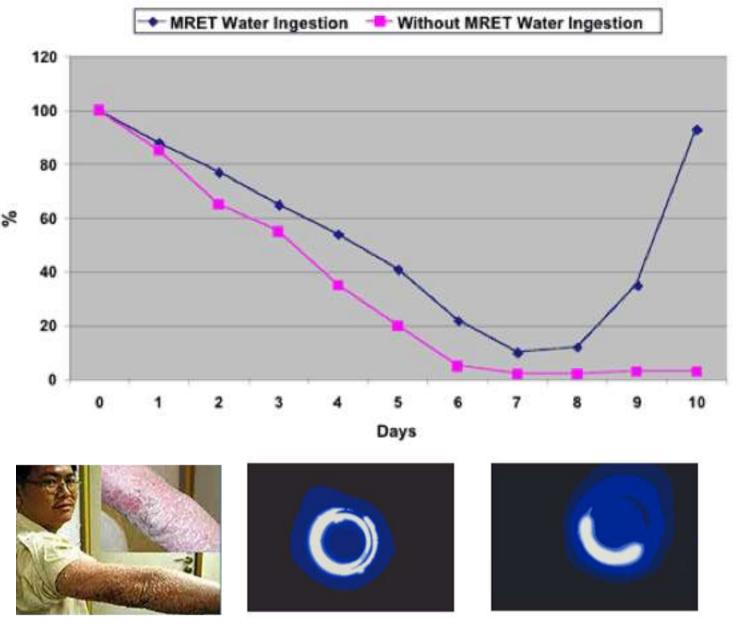
The study was conducted at Cedars-Sinai Medical Center based on the results of blood samples of Ronny Yip. He is a patient of Cedars-Sinai Comprehensive Cancer Center for metastasized naso-pharyngeal cancer.

He ingested MRET Activated water on a regular basis while going through his Taxotere chemotherapy treatments in September 1998, October 1998 March 1999, April 1999, and May 1999 respectfully. This study shows that ingestion of MRET Activated water during chemotherapy treatments compensates for the regular side effects of chemotherapy such as long term rebounding of WBCC. The patient also states that the ingestion of MRET Activated water helps him to get rid of the symptoms of general weakness, headache, and nausea.

The statistical calculations based on the study of Blood specimens show that on the seventh day after chemotherapy WBCC drop to the level of 0.5-0.6 1000/U which means to 5%-9% of their prechemotherapy level.

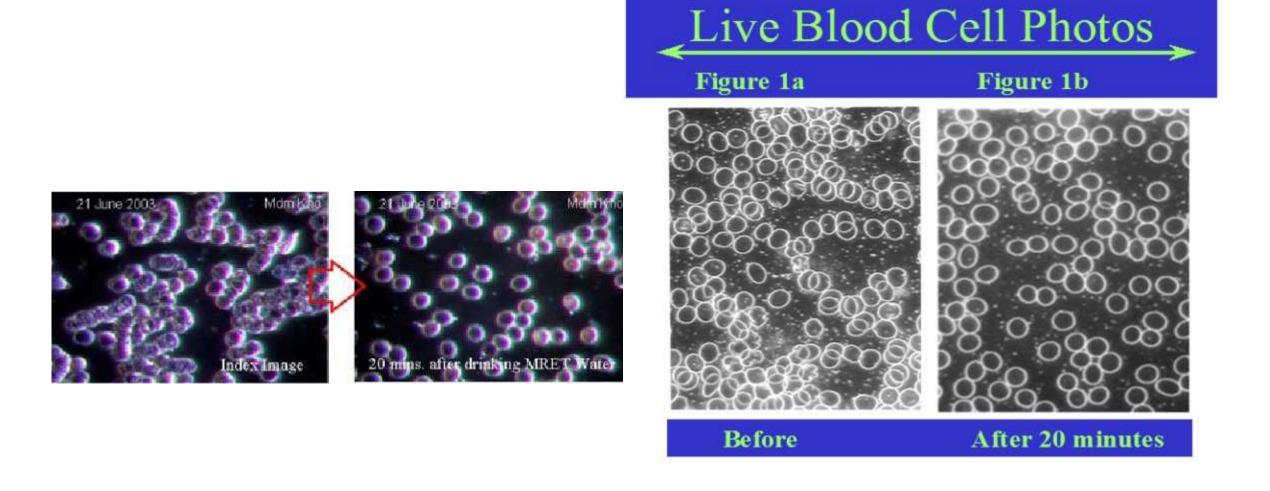
The mean value of WBCC regains more than 90% of pre-chemotherapy level on the tenth day after chemotherapy treatment. This is statistically significant with p < 0.05.

#### Rebounding Effect of MRET Water on WBC Counts



MRET Activated Water

Non-activated Water



### Strengthen immunity 增强免疫力

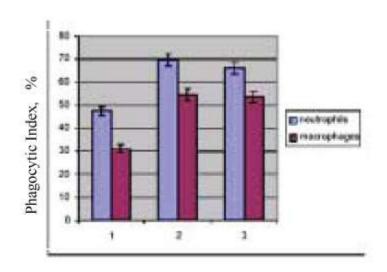


Fig 3A: Phagocytic Index of neutrophils and macrophages in two weeks of experiment (object of phagocytosis - Staphylococcus aureus): 1 - Control group; 2 - Mice on MRET water (preventive for 4 weeks); 3 - Mice on MRET water (preventive for 2 weeks).

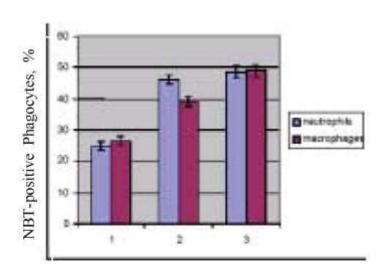


Fig 4: Oxygen-depended bactericidal activity (NBT-test) of neutrophils and macrophages in two weeks of experiment: 1 – Control group; 2 – Mice on MRET water (preventive for 4 weeks); 3 – Mice on MRET water (preventive for 2 weeks).

## Clear infection in the kidney 清除肾脏的细菌感染

Table 1: The effect of consumption of MRET water on the persistence of pathogens of staphylococcal infection in homogenate of kidneys of mice

Groups of	Period	Number of CFU	Number of CFU	Number of CFU
experimental	of	in 1 ml of	in 1 ml of	in 1 ml of
animals	activati	homogenate of	homogenate of	homogenate of
	on, min	kidneys in 1 day	kidneys in 3 days	kidneys in 5 days
Group 1, N=15	15	24266 ± 1330*	43227 ± 5600*	15160 ± 1310*
Group 1, N=15	30	$19316 \pm 1460$	29600 ± 1890*	14000 ± 1660*
Group 2, N=15	15	23387 ± 2760*	42550 ± 4500*	14550 ± 1750*
Group 2, N=15	30	24060 ± 870*	41760 ± 3090*	10600 ± 1200*
Control, N=15		19000 ± 2620	76590 ± 4340	$31250 \pm 2220$

#### CFU – colony forming unities

<sup>\* –</sup> marks statistically significant results with p < 0.05 compare to Control

# Experiments proved MRET water inhibits growth of culture of Staphylococcus 抑制葡萄球菌生长的实验

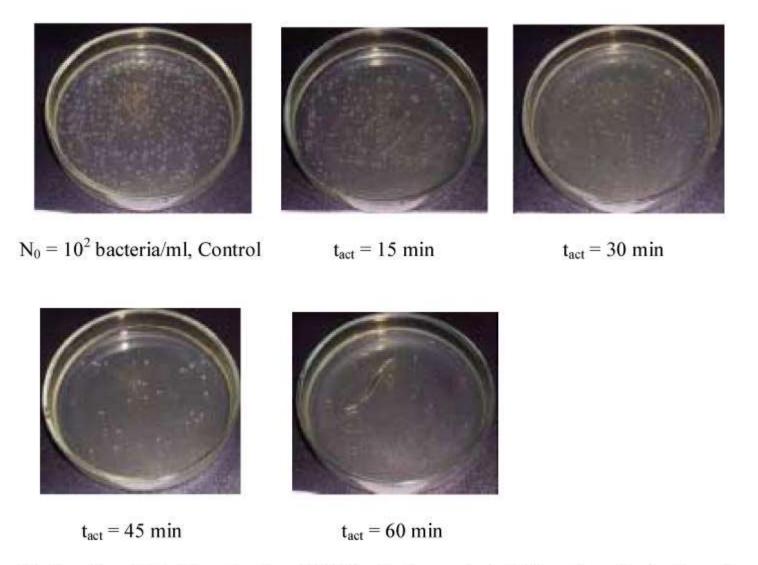


Fig 9: The effect of time duration of MRET activation on the inhibition of growth of culture of Staphylococcus aureus Wood-46 with initial concentration of culture  $N_0 = 10^2$  bacteria/ml.

# Experiments proved MRET water inhibits growth of E.coli 抑制大肠杆菌生长的实验

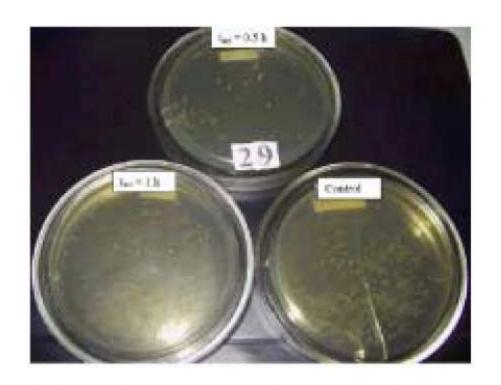
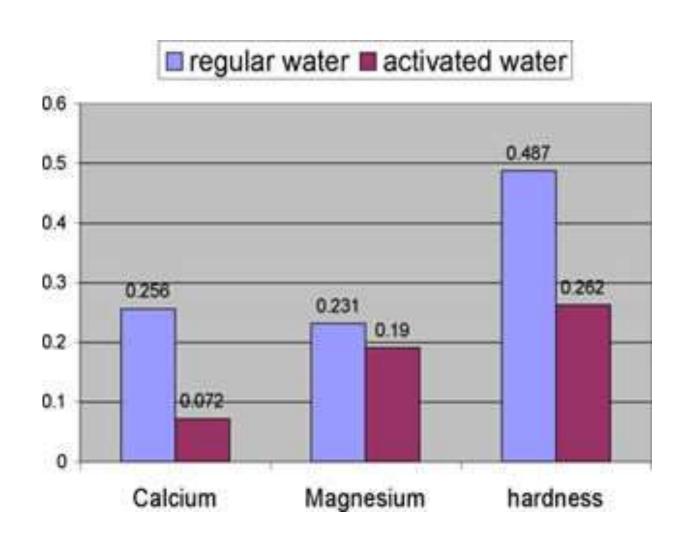


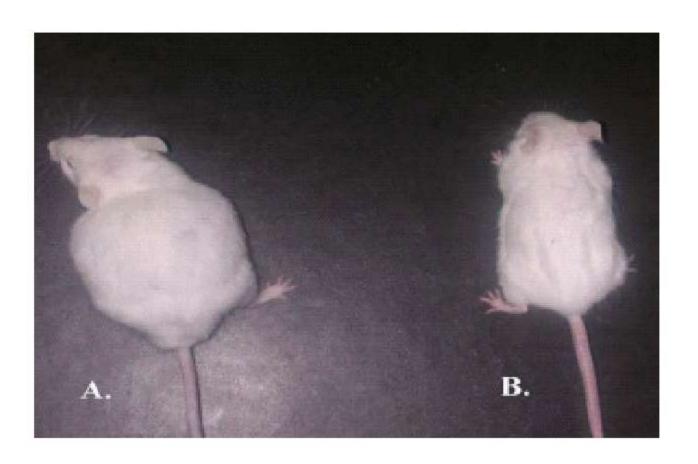
Fig 3: Selected Petri dishes with grown colonies of E.coli K-12 after 29 hours of experiment.

### Decrease hardness o water 降低水的硬度



在接种艾氏腹水瘤细胞后的第十八天外形对照 A. 对照组小鼠 B. "预防性治疗"方案组(最佳活化时间 30分钟)

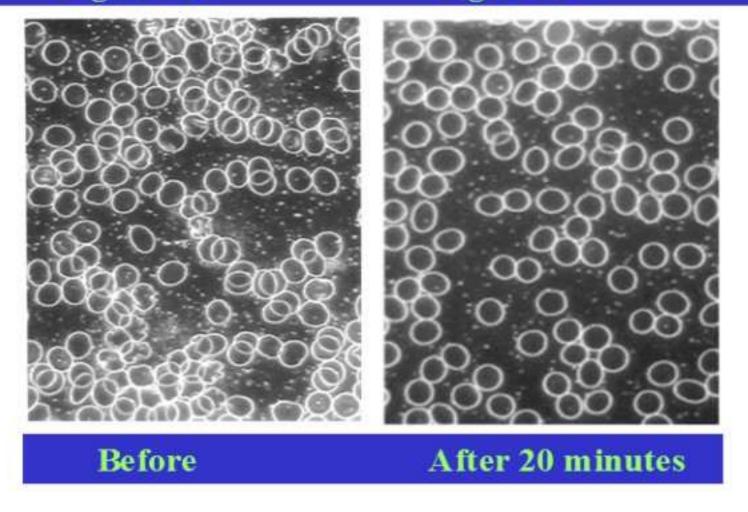
**Pic 2:** The appearance of mice from "control" (A) and "preventive treatment" groups (optimal activation time 30 minutes) (B) on the 18th day after ascitic Ehrlich carcinoma cell inoculation.



## Live Blood Cell Photos

Figure 1a

Figure 1b



#### **Schumann Resonances**

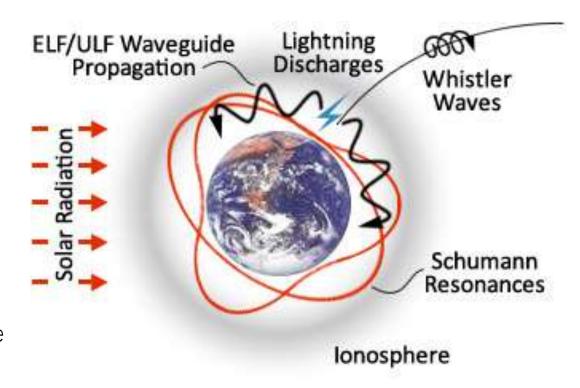
Schumann resonances are global electromagnetic resonances in the cavity formed between the earth's surface and the ionosphere. Schumann resonances were named after German physicist Winfried Schumann, who first predicted them in 1952. Electromagnetic impulses like those from global lightning flashes (Earth's thunderstorm activity) fill this cavity and excite the Schumann resonances. The first accurate measurements of the Schumann resonances were made from 1960 to 1963 and since then there has been an increasing interest in them across a wide variety of fields.

Schumann resonances in Earth-ionosphere cavity. Courtesy NASA.

Resonances can be observed at around 7.8, 14, 20, 26, 33, 39 and 45 hertz, with a daily variation of about  $\pm$  0.5 hertz, which is caused by the daily increase and decrease in the ionization of the ionosphere due to UV radiation from the sun (also see the live data).

Global Coherence Research GCMS Boulder Creek magnetometers

The signals recorded from the GCMS Boulder Creek magnetometers are converted to the frequency domain with the Fourier transform. The Schumann resonances occurring over an eight-hour period can be clearly seen at approximately 7.8, 14, 20, 26, 33, 39, and 45 hertz.



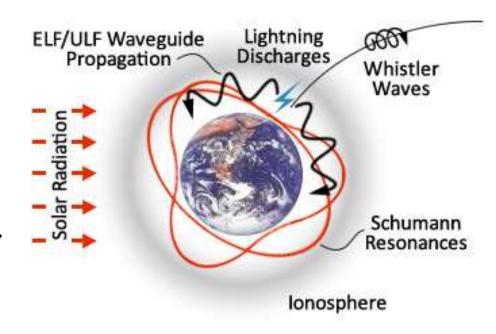
#### 舒曼共振:

舒曼共振是在地球表面和电离层之间形成的球形波导腔的环球电磁共振。

舒曼共振(SR)是地球电磁场谱中极低频(ELF)部分的一组谱峰。舒曼共振是全球电磁共振,由地球表面和电离层形成的球形波导腔的闪电放电产生和激发。

闪电放电被认为是舒曼共振激发的主要自然来源; 闪电通道的表现就像巨大的天线、辐射频率在100 kHz以下的电磁能量。[这些信号在距离闪电源很远的地方很弱,但地球电离层波导在ELF频率上表现得像一个谐振器,在共振频率上放大了闪电的光谱信号。

舒曼共振以德国物理学家Winfried Schumann的名字命名,他在1952年首次预测了舒曼共振。电磁脉冲如来自全球雷暴的闪电(地球的雷暴活动)填满这个空腔并激发舒曼共振。从1960年到1963年,舒曼共振的第一个精确测量被制造出来,从那时起,人们对各种各样的领域越来越感兴趣。

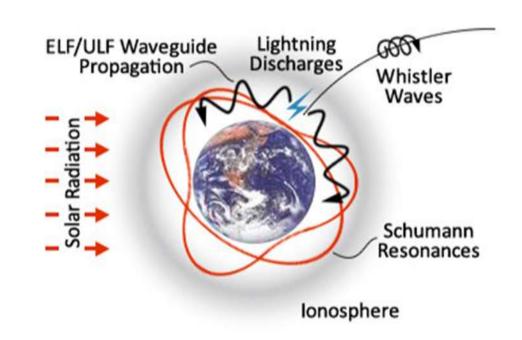




在地球电离层的舒曼共振。由美国宇航局提供。

可以观察到约7.8,14,20,26,33,39和45赫兹的你共振,每日变化约±0.5赫兹,每日的增减由来自太阳的紫外线辐射引起的电离的电离层(也参见实时数据)引起。

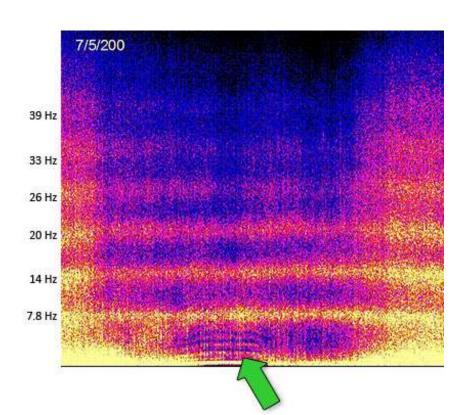
全球相干研究GCMS Boulder Creek磁力仪 从GCMS Boulder Creek磁力计中记录的信号被转换为频率域和傅里叶变换。舒曼共振发生在8小时的时间内,可以清楚地看到大约7.8、14、20、26、33、39和45赫兹。



Interest in the Schumann resonances has gone beyond the boundaries of geophysics, into medicine, where it has posed questions about the interactions between planetary rhythms and human health and behavior (for more detail see the July 7, 2009 Commentary)

The similarity of the 7.8-hertz Earth resonance and human brainwave rhythms was quickly identified after the Schumann resonances were first measured, and early studies were able to demonstrate a correlation between these resonances and brain rhythms. Numerous studies conducted by the Halberg Chronobiology Center at the University of Minnesota along with other studies have since shown that there are important links between solar, Schumann and geomagnetic field line resonances and a wide range of human and animal health and wellness indicators.

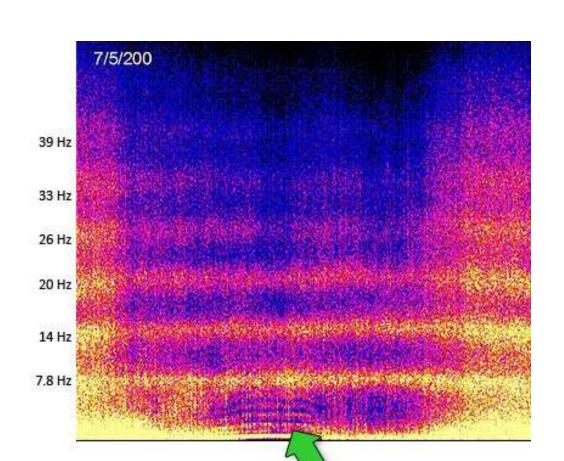




舒曼共振的兴趣已经超越了地球物理学的界限,进入了医学领域,在那里它提出了关于行星节律与人类健康和行为之间的相互作用的问题。

在舒曼共振首次测量之后,7.8赫兹的地球共振和人类脑波节奏的相似性很快被确定,早期的研究能够证明这些共振和大脑节律之间的相关性。明尼苏达大学的Halberg Chronobiology中心和其他研究一起进行的大量研究表明,在太阳能、舒曼和地磁场线共振以及广泛的人类和动物健康和健康指标之间有重要的联系。





### **Yin and Yang**

Ancient Chinese teachings tells us that we need two environmental signals: the Yang (masculine) signal from above and the Yin (feminine) signal from below. This description correlates with the relatively strong signal of the Schumann Waves surrounding our planet being the Yang signal, and the weaker Geomagnetic Waves coming from below being the Yin signal.

University Research has proven this to be true. Experiments have been performed where groups of volunteers were subjected to deprivation of either the Yang (Schumann Waves) or the Yin (Magnetic Waves). The results have been disturbing, where after only a short time, the subject's circadian rhythms diverged and that they suffered emotional distress and migraine headaches. Furthermore, after only a brief exposure to 7.8 Hz Schumann Vibrations, the volunteers health stabilized again. Depriving the human brain of these waves can make you sick!



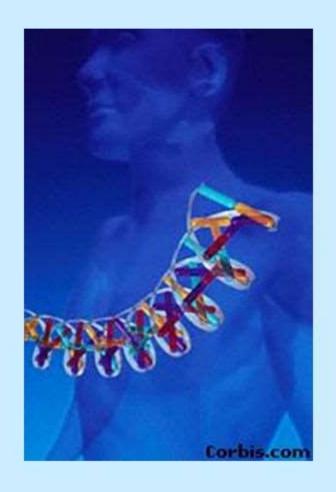
#### 阴和阳

古老的中国教义告诉我们,我们需要两个环境信号:从上面的阳(阳性)信号和下面的阴柔(阴性)信号。这一描述与我们的行星上的舒曼波的相对较强的信号一致,即阳信号,而较弱的地磁波则来自于阴信号。

大学的研究已经证明这是真的。在实验中,志愿者被剥夺了阳(舒曼波)或阴(磁波)。结果令人不安,在短暂的时间后,受试者的昼夜节律出现了差异,他们遭受了情绪困扰和偏头痛。此外,在仅仅短暂接触7.8赫兹舒曼振动之后,志愿者的健康再次稳定下来。剥夺人类大脑的这些波会让你生病!

# DNA

- **DNA** is often called the blueprint of life.
- In simple terms,
   DNA contains the instructions for making proteins within the cell.



# DNA is structured like a ladder, Opens and Closes like a zip, Codes data like Morse code and Coils tightly



DNA is structured like a ladder, opens and closes like a zip, codes data like Morse code and coils tightly

### DNA: the Blueprint of life, the 'smartest' molecule in existence

DNA is one of the longest molecules in the natural world. You possess enough DNA, stretched out in a line, to reach from here to the sun and back more than 300 times.

Yet each cell nucleus must contain two metres of DNA, so it has to be very flexible. It coils - much like a telephone cord - into tight complex structures called chromatins without corrupting the vital information within.

### DNA – the blueprint of life



And despite being packed in so tightly, the genetic material can still be accessed to create new copies and proteins as required.

Human cells contain 23 pairs of chromosomes, with each containing one long DNA molecule as well as the proteins which package it. It's no wonder DNA needs to be extremely supple.

Amazingly, this folded and packed form of DNA is approximately 10,000 times shorter than the linear DNA strand would be if it was pulled taut.

This is why we have the 'luxury' of having the plans for our entire body in nearly every cell.

Two metres of DNA coils like a telephone cord to fit into each cell

http://www.bbc.co.uk/science/0/22199991

DNA: 生命的蓝图 自然界中最聪明的分子

DNA是自然界中最长的分子之一。你拥有足够的DNA,延伸到一条线上,从这里到太阳,再回到300多次。

但是每个细胞核必须包含两米长的DNA, 所以它必须非常柔软。它是一种很像电话线的复杂结构, 称为"核染色质", 不会腐蚀内部的重要信息。

尽管如此紧密地包装,遗传物质仍然可以被访问,以创造新的副本和蛋白质。

人类细胞包含23对染色体,每个染色体包含一个长长的DNA分子,以及包裹它的蛋白质。毫无疑问,DNA需要非常柔软。

令人惊讶的是,这种折叠和填充的DNA大约比线性DNA链短1万倍。

这就是为什么我们在几乎所有的细胞中都有制造全身细胞的 "奢侈品"的蓝图。

### DNA – the blueprint of life





Two metres of DNA coils like a telephone cord to fit into each cell

### Water molecules characterize the structure of DNA genetic material

Just as **blueprints** direct the building of a house, DNA molecules contain the genetic instructions used in the development and functioning of a living organism.

The DNA's double helix never occurs in isolation; instead, its entire surface is always covered by water molecules which attach themselves with the help of hydrogen bonds.

Water molecules surround the genetic material DNA in a very specific way. Scientists at HZDR have discovered that, on the one hand, the texture of this hydration shell depends on the water content and, on the other hand, actually influences the structure of the genetic substance itself.

DNA – the blueprint of life



https://www.sciencedaily.com/releases/2011/04/110426091122.htm

### 水分子影响遗传物质DNA的结构

就像设计房子的蓝图一样,DNA分子包含了一个生物体的发育和功能所使用的遗传指令。

DNA的双螺旋从来不会单独发生; 相反,它的整个表面总是被水分子所覆盖, 这些水分子通过氢键来连接自己。

HZDR的科学家们发现,水分子以一种非常特殊的方式包围着基因物质DNA。一方面,这种水化外壳的结构依赖于水的含量,而另一方面,实际上影响了遗传物质本身的结构。

https://www.sciencedaily.com/releases/2011/04/1104 26091122.htm

### DNA - the blueprint of life

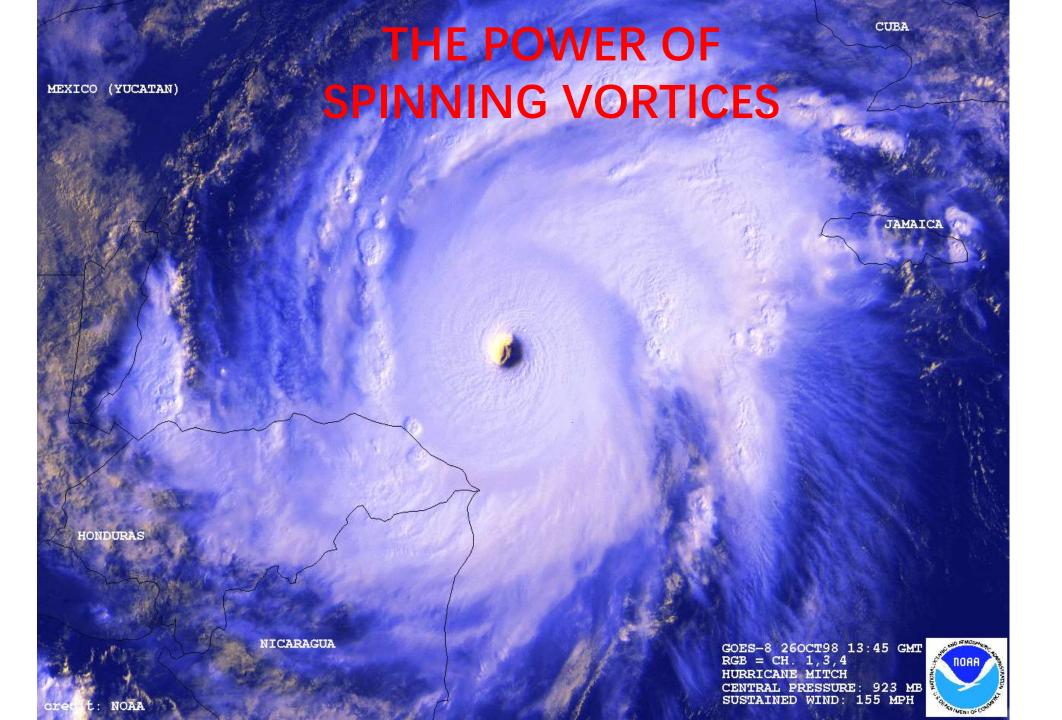




#### Unstable DNA double helix structure image



DNA double helix structure



## THE POWER OF SPINNING VORTICES

What do smoke rings, tornadoes and the Great Red Spot of Jupiter have in common? They are all examples of vortices, regions within a fluid (liquid, gas or plasma) where the flow spins around an imaginary straight or curved axis. Vortices are power of genesis of the Universe.







# "Everything in the universe is spinning.

Instead of fighting nature, work with nature because it is highly successful at producing a serious amount of energy. Attach your technology to it and you will have very large capacity to do things which seem like miracles today."

Nassim Haramein, The Resonance Project



Spiral movement is a prerequisite in all living systems, and these spirals of energy lie at the heart of nature. They allow sap to rise, drops to form, shells to emerge, and threads of DNA to open and close in response to information transmitted by moving cellular water. Healthy water naturally forms spirals as it flows. Spiral movement is present in the natural flow of water in rivers, streams, and the ocean, in the human circulatory system, and in the planetary movements in space. These vortices act as powerful resonant structures, energizing, oxygenating, purifying, and ionizing the water as it moves.

The inside layers of water in a vortex flow much faster than outer layers. In a vortex, the speed multiplied by the radius is a constant. Theoretically, this means that the velocity at the center of a vortex is infinite. As the forces in a vortex approach infinity and as layers expand and contract, hydrogen bonds in the water molecule begin to stretch. This opens the molecular structure of water for a constant interchange and exchange of electrons. As hexagonal structuring increases, the water's ability to carry vibrations and frequency information also increases.



### Scientific Evidence of the Magnetic Effect

The use of magnetism to revitalize and purify water is not new. Ancient Romans were among the first to utilize the Earth's magnetic properties with their aqua ducts designed to purify and revitalize water. Some recent innovators have confirmed the health benefits of magnetic therapies and uses, including Johann Grander, Dr. Mu Shik Jhon, and Walter Rawls, Jr. PhD.

Of the many scientists who have studied and tested magnetic water treatments, Dr. Gerhard Pioch, an Austrian researcher, focused on magnetized water and its effects on human health. He reported that residues from poisonous chemicals, heavy metals and harmful substances in the human body are most commonly are of negative polarity and are not eliminated from the body. Dr. Pioch discovered that chemical wastes in the body are washed out by using magnetically-treated water. Contaminants deposited into the body, such as medications, fertilizers, food-borne chemicals, pesticides (including traces of DDT) and heavy metals are neutralized by the magnetized water treatments.

Another scientist, Dr. Albert Roy Davis spent many years finding ways to demonstrate how water is transformed by exposure to magnetic fields. He published his research results in Anatomy of Biomagnetics in 1974, and other researchers later confirmed and completed his findings. They showed that magnetically treated water affects the human body when taken internally and regularly for a considerable period of time. Also, when water is magnetically treated, more hydroxyl (OH-) ions are created to form alkaline molecules and reduce acidity. Neutral water has a pH level of about 7, whereas magnetized water tends to be more alkaline. His research has shown that the following phenomena can be observed after water has been magnetized:

Increase in hydrogen ion activity

Decrease in water weight

Decrease in quantity of nitrogen dissolved in water

Increase in the number of crystallization centers

Vortexing water activates, vitalizes, and helps the body prevent disease - this makes it a very important influence to achieve the maximum healing effects of pure water. Though most filtered water is usually chemically clear, it is dead compared to water in rushing brooks which spins as it flows. By applying the vortex effect, we are energetically cleaning the water and incorporating oxygen into the water - just like it happens in nature. As in nature, the pressure of this centripetal inner-winding vortex assists water to change, transform and renew itself. This vortex action also erases harmful vibrational frequencies, such as those found in chlorine, fluoride, PCB's, and to eliminate bacteria, parasites and any other toxins.





### Some of the Benefits Of Drinking Oxygenated Water

One of the most important benefits of drinking oxygenated water is that it helps strengthen the immune system. The oxygen-rich environment created by drinking this water promotes the growth of good bacteria, but makes it incapable for the harmful bacteria to survive.

### Improves Digestion

The friendly bacteria that reside in our intestines help in the breakdown of ingested food and promote digestion. As good bacteria thrive in oxygen-rich conditions, drinking oxygenated water may contribute in improving digestion.

### Promotes Aerobic Respiration

Cellular respiration, in which the cells derive energy from the food ingested, can be either aerobic or anaerobic. When cellular respiration occurs in the presence of oxygen, it is called aerobic respiration, and when it occurs in the absence of oxygen, it is called anaerobic respiration. Aerobic respiration is considered to be the most effective way to obtain energy from food molecules.

### Boosts Energy Levels

With more oxygen circulating in the bloodstream, you may feel more energetic, alert, and less tired during the day. Drinking oxygenated water can help maintain blood oxygen in the healthy range. This ensures that your blood transports enough oxygen to the muscles and the brain, thus boosting overall stamina and well-being.



# Dr Otto Heinrich Warburg

Winner of the 1931 Nobel Prize in Physiology



Discovered the Cause of Cancer in (1923)

# "CANCER grows in Oxygen Deprived ACIDIC tissue"

"DISEASES cannot survive in an ALKALINE BODY"

"Cancerous tissues are acidic, whereas healthy tissues are alkaline"

"Deprive a cell 35% of its oxygen for 48 hours and it may become cancerous."

# Lack of Oxygen is a cause....

- Dr. Otto warburg a noble laureate in Medicine discovered when cells denied 60 % of oxygen requirement they exhibit anaerobic respiration resulting in cancer cells due to fermentation.
- Over 70 % of our bodies are water, aerobic respiration burn oxygen and glucose. In order to create energy body also needs 500gms of pure Hydrogen, even our DNA is held by Hydrogen bonds. When the pH is alkali they have greater potential to absorb hydrogen which results in more oxygen delivered to the cells.



# Dr. Otto Heinrich Warburg 1931 Nobel Prize Winner The Root Cause of Cancer



Dr. Otto Warburg discovered the root cause of cancer in 1923 and he received the Nobel Prize for doing so in 1931. Dr. Warburg was director of the Kaiser Wilhelm Institute (now Max Planck Institute) for cell physiology at Berlin. He investigated the metabolism of tumors and the respiration of cells, particularly cancer cells. Below are some direct quotes by Dr. Warburg during medical lectures where he was the keynote speaker:

"Cancerous tissues are acidic, whereas healthy tissues are alkaline.
Water splits into H+ and OH- ions, if there is an excess of H+, it is
acidic; if there is an excess of OH- ions, then it is alkaline."

In his work The Metabolism of Tumours he demonstrated that all forms of cancer are characterized by two basic conditions: acidosis and hypoxia (lack of oxygen). Lack of oxygen and acidosis are two sides of the same coin: where you have one, you have the other.

### **Evidence of the Vortexing Effect**

"Comprehend nature, then copy Nature." - Viktor Schauberger (1885-1958)

The qualities of vortexed water were best described by Viktor Schauberger, a brilliant Austrian inventor and naturalist. He established solid evidence of the huge difference between "dead water" and "living water." "Dead water" is still water such as bottled or distilled water. Living water, as he taught, is like the water found in springs and rivers that forms spirals and vortices as it flows causing higher zeta potentials (life force), higher ionization, oxygenation, kills parasites and bacteria, as well as raising the body's electron count.

Further research was recently done by Dr. Mu Shik Jhon of Korea. He showed that in a vortex the inner layers of water flow much faster than the outer layers, and that the velocity at the center of the vortex is infinite. The hydrogen bonds in the water molecules begin to stretch as these layers expand and contract. This opens the molecular structure of water for a constant interchange and exchange of electrons. As hexagonal structuring increases, the water's ability to carry vibrations and frequency information also increases. Dr. Jhon understood the importance of this vortex effect to restructure water.





# Scientifically validated technology... HEXAGONAL WATER CLUSTERS

"...the core of each DNA double helix is a column of water clusters...Small hexagonal water clusters fit into and through the hexagonal channels in cell membranes and inside the cell, swiftly delivering their goods and removing wastes." (\_\_\_\_\_\_\_\_ - Institute of Heartmath Research Center).

"...Aging is a loss of Hexagonal Water from organs, tissues and cells, and an overall decrease in total body water. Replenishing the Hexagonal Water in our bodies can increase vitality, slow the aging process, and prevent disease".

:- Dr. Mu Shik Jhon.

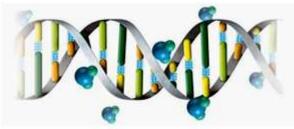
### DNA – the blueprint of life







Unstable DNA double helix structure image



DNA double helix structure

Most tap water and bottled water is composed of large water conglomerates which are too large to move freely into the cells. This structure allows toxins to build-up in the body.

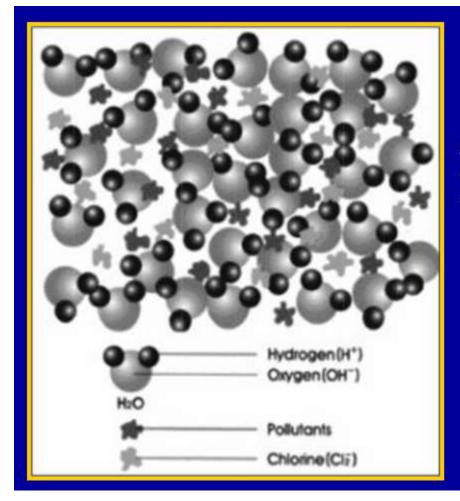


Fig. 5, on the other hand, portrays that most tap water and bottled water is composed of large water conglomerates which are too large to move freely into the cells. This structure allows toxins to build-up in the body.

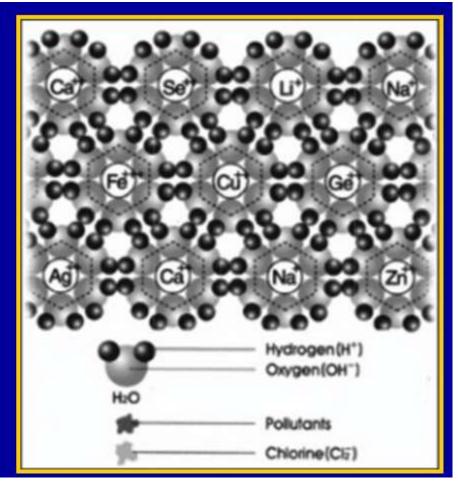
Fig.5: Most tap water and bottled water- Pollutants and toxins can easily bond with water molecules.

This creates toxic accumulation and cellular problems.

Hexagonally-structured water allows rapid penetration within the cells of the body. This allows for cellular communication, intracellular water movement, enzyme function, cleansing of the body's cells, efficient transport of nutrients into the cells, greater stabilization, superior hydration, electrical communication between cells, and many other metabolic processes.

As shown in Fig. 4 below, hexagonally-structured water allows rapid penetration within the cells of the body. This allows for cellular communication, intracellular water movement, enzyme function, cleansing of the body's cells, efficient transport of nutrients into the cells, greater stabilization, superior hydration, electrical communication between cells, and many other metabolic processes.

Fig.4: Hexagonally shaped water- Pollutants and toxins are unable to bond with water molecules – this prevents toxin accumulation and cellular problems.



The **vortexing process** causes water dipoles to align/realign, creating greater molecular organization and restoring the water's liquid crystalline state. Water is energized by movement and by turbulence. When water moves, it naturally spirals, breaking away from each obstacle with a spin (vortex). Spinning ions (charged particles) within the water create tiny magnetic fields that push other ions away, keeping them separate and biologically available.

scientific research reveals that magnetic vortex water:

Raises the Zeta Potentials (Life Force)
Oxygenates and Energizes
Increases the amount of electrons
Lowers Oxidized Reduction Potential (ORP).
Raises the magnetic energies.
Neutralizes negative frequencies.
Adds positive vibrational frequencies.

Raises the pH factor in the body.





Magnetic vortex water revitalizes and improves hydration of cells and organs, and supports the immune system by increasing cellular oxygenation.

These improvements may result in:

Renewed energy and stamina. (Zeta Potentials)

Renewed hydration & quenched thirst.

Regular, normal bowel function.

Detoxification of impurities in the body.

Weight loss through proper elimination.

Regulated heart rate and blood pressure.

Smoother, softer skin, stronger nails, lusterous hair.

Fewer colds, flu and viral illnesses.

Enhancing the body's auric energy field.

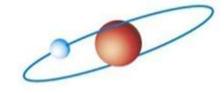
Reduced bloating and water retention.

Raised pH factor in the water.



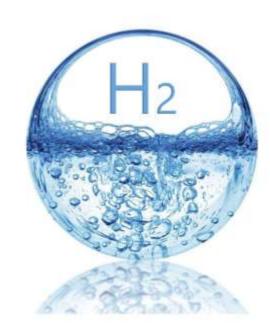


## Hydrogen – the simplest element



Water and hydrogen are two of the most underrated substances on the planet. Separately, they play a role in nearly all metabolic functions. When used together as hydrogen-rich water, their potential is magnified many times.

- 1. Hydrogen is a healer the fundamental antioxidant. When carried in water it reaches every organ and every cell.
- 2. Hydrogen is a source of fuel—without byproducts like lactic acid.
- 3. Hydrogen-rich water neutralizes toxins AND washes them away.
- 4. Hydrogen cleanses the energetic body too.

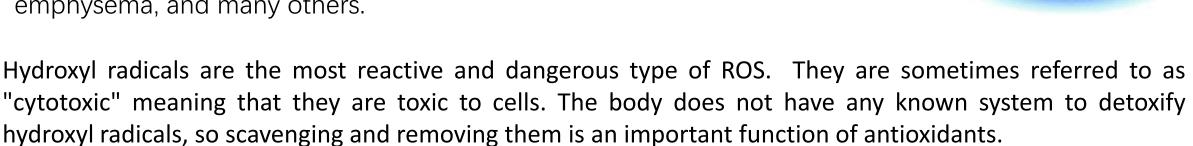


Albert Szent-Györgyi, the Nobel Prize-winning biochemist, said that hydrogen, rather than oxygen, was the fuel of life. Everyone knows we need oxygen to live, but oxygen's counterpart (hydrogen) is the real fuel. Oxygen burns hydrogen releasing the energy (in the form of ATP) that runs our bodies. Water supplies both the fuel (hydrogen) and the fire (oxygen); it is hydrogen that is often the limiting factor. The word hydrogen comes from the Greek, meaning "water-former." Water is formed when hydrogen is burned by oxygen. It is created every day in our bodies as we burn hydrogen to create ATP. Hydrogen and oxygen participate in a continuous cycle that generates both water and energy.

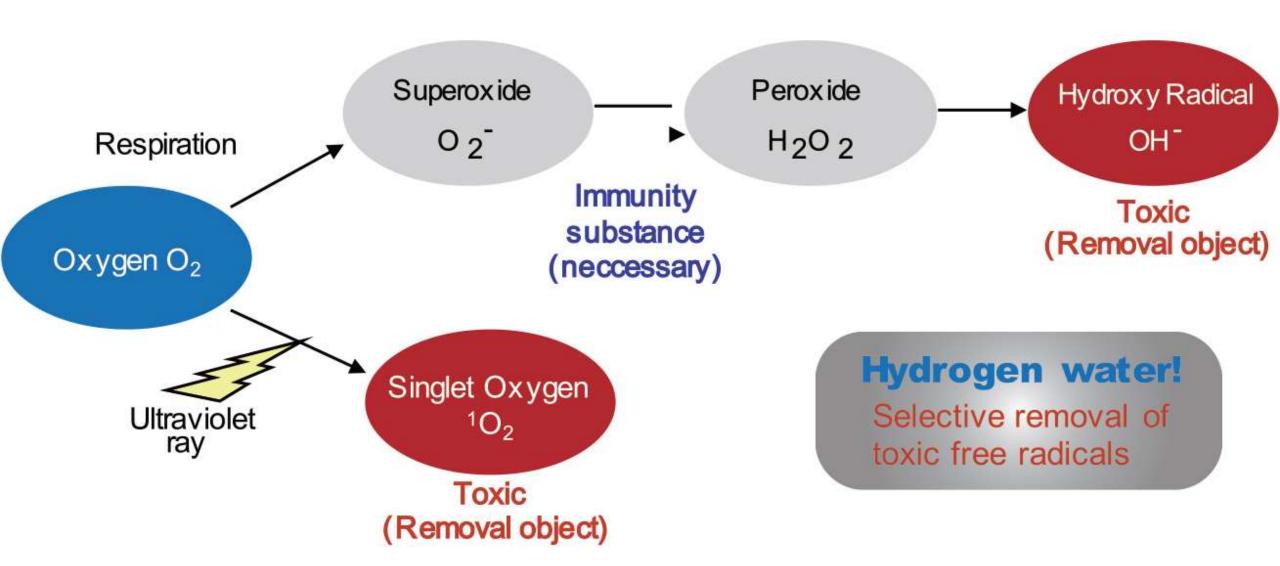
Hydrogen acts as a therapeutic antioxidant by selectively neutralizing cytotoxic oxygen radicals

Oxidation reactions are a normal part of cell function, but they can also cause damage to cells, called **oxidative damage or oxidative stress**.

Oxidative stress is believed to contribute to the **aging process**, and is involved in the development of many human diseases including cancer, Parkinson's disease, Alzheimer's disease, atherosclerosis, heart failure, heart attack, stroke, diabetes mellitus, chronic fatigue syndrome, alcohol-induced liver damage, emphysema, and many others.



Hydrogen is a naturally occurring antioxidant which has no color, odor or taste. It can be inhaled, injected into the body, or ingested in the form of hydrogen rich water. Drinking hydrogen rich water is an effective, portable, easy and safe means of delivering molecular hydrogen to the body. Hydrogen selectively targets hydroxyl radicals to effectively protect cells. However, hydrogen does not react with other ROS which have necessary physiological roles.



### **Health and Longevity Applications:**

### Anti-Aging

Molecular hydrogen is a powerful antioxidant, that helps to defend cells and genes from damage and death caused by harmful free radicals. These properties, in combination with its anti-inflammatory properties help enhance longevity because aging is caused by tissue degeneration, oxidative stress and inflammation.

#### Disease Prevention

There are currently 150 different diseases in which molecular hydrogen appears to exert a beneficial effect. Some of the most common include: cardiovascular disease, Parkinson's disease, Alzheimer's disease, dementia, diabetes, allergies, osteoporosis, atherosclerosis, heart disease, and cancer.

H2 Safety

H2 is completely non-toxic and naturally produced in the body when intestinal bacteria breakdown dietary fibers. There are no adverse effects associated with H2, and when H2 is broken down, the byproduct is simply water (H20).

### Who Can Use H2 Water

Since it has such a high safety-profile, and produces such a wide-range of positive health effects, virtually everyone can benefit from it. H2 is so safe, that scientists are currently studying it as a therapeutic aid for terminally ill patients, for pediatric purposes, for pregnant women, and even for fetuses and newborns.

# Using selected minerals essential for optimal health

The body has more than 90 different kinds of elements. These elements are essentials to the body, although some occur in very small amounts, working as a team, they serve to protect and enhance cellular health.

The minerals are also important to hold the structure and antioxidant hydrogen and free electrons.

MINERALS

Calcium

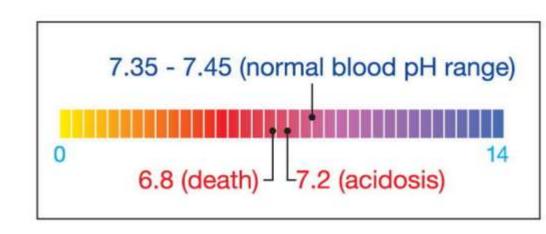
Magnesium

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Maintaining of blood in a healthy alkaline pH and bone health depends on adequate supply of minerals.

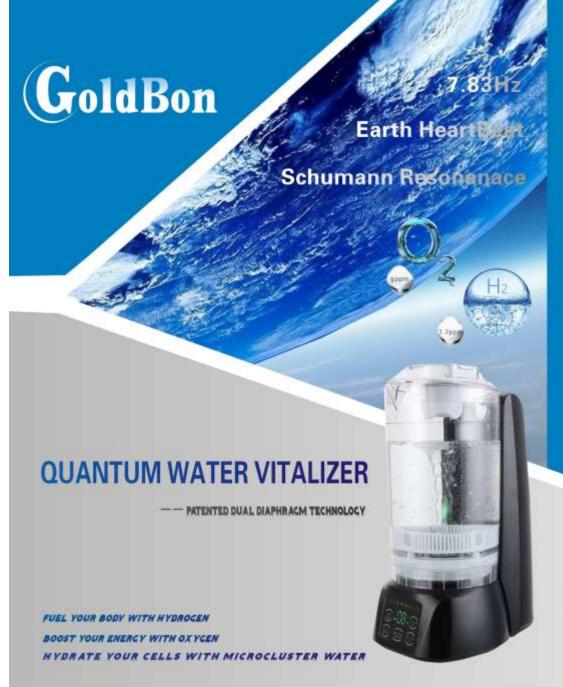
The selected minerals used in Quantum Water Revitalizer include selenium, FIR emitting ceramics and alkalizing calcium, magnesium, zinc and iron etc.



### **Operational Tips**

- It is very important to put distilled or high quality multi-filtered water or bottled water into the Quantum Water Revitalizer.
- Under no circumstances use unfiltered tap water.
- After processing the water, store the vitalized water in a separate container.
- Glass should be used and not metal or plastic.
- To maximum benefits, Drink the Quantum Revitalized Water within 30mins;
- For the first time use, cleanse the mineral basket with tap water to remove the residue powder on the mineral ceramics.





#### **Quantum Water Vitalizer Features**

- Proprietary dual diaphragm hydrogen generating structure
- Optional dual hydrogen generation
- Patented technology protection
- Touch control panel
- · Energizing alkaline mineral basket
- Humanized water collector
- Proprietary bio-quantum implant technology
- 7.83Hz molecular resonance activation
- Magnetic vortex oxygenation design
- LED colorful display
- High quality food-grade eco material
- volume marking on water container

Dimensions: 230\*280\*375 (L\*W\*H)

Net weight: 2 1KG

Gross weight: 28KG

Quantity: 1SET

Model: HY-FH2-B

Product specifications

Designed & Produced by Goldbon USA Inc

Website: www.goldbonusa.com

Manufactured by Guangzhou Hanying Bio-technology Development Co., Ltd Add: Quanxing Industry Park, 1# Gangxi Rd, Dashi, Panyu District, Guangzhou

Marketing for Thailand, Malaysia, Singapore, Cambodia and Laos by Just Connect Co., Ltd Add: 76/1 Chaeng Watthana Road, Anusawari, Bangkhen, Bangkok, Thailand 10220 Tel:02-147-3611