

## **LifeWave: Acupuncture Meets Nanotechnology**

A distilled excerpt from Peter Ragnar's book, "The LifeWave Experience."

The concept of the meridian system, a network of energy pathways that can be both mapped and identified goes a long way back to traditional Chinese medicine, primarily to the ancient medical classic "The Canon of Medicine (Nei Jing)" attributed to the Yellow Emperor. It is the oldest scientific medical manual still in use today.

So what are meridians? They are energy pathways that oscillate with life force. Meridians are not nerve or tissue cells, even though nerve tissue is located along meridian pathways. Meridians are more like tiny streams or rivulets of highly polarized water, which are now believed to be long strings of liquid crystals that react to light and transmit bioelectric signals along their pathways.

Meridians are traditionally like a thread in a fabric that links all the organs, glands, and bodily substances. The "Nei Jing" says, "The meridians move the qi and blood, regulate yin and yang, moisten the tendons and bones, benefit the joints." The meridians also link the inside of the body with the outside.

While most modern medicine, especially in the West, focuses on the nervous system, the circulatory system, the immune system, etc., the traditional Chinese medicine approach is much more basic. It deals, not with any particular appliance, but with the basic power generation system that runs them all.

There are 12 regular meridians, which are split into yin and yang. Yin and yang are electrically polarized, with a negative charge for yin and a positive charge for yang – just like in electrical wiring, where you have a black wire that is positive and a white wire that is negative. White wires connect to white wires and black wires connect to black wires.

It's the same way with the organs. The white wire organs are the lung, heart, kidney, spleen, liver and pericardium (Please note, some acupuncturists consider the pericardium an independent organ.) The black wire organs are the large intestine, small intestine, stomach, urinary bladder, gallbladder, and what is called the triple burner, which is not an organ as such, it represents the control of bodily fluids.

The yin organs and the corresponding yang organs are put together in pairs, think of each pair of yin/yang organs as a single unit. It's as if each paired organ system were an electrical appliance, with the hot, positive black, or yang wire connected to the other pole. Both organs have to work to balance each other, each being supplied with an equal amount of current or life wave.

These organ pairs are: heart/small intestine, lungs/large intestine, spleen/stomach, liver/gallbladder, kidneys/bladder, pericardium/triple-burner.

In the human body, we know that water conducts electricity more effectively than tissues, and we also know how effectively crystals conduct a current. In fact, if you think about it, it's just amazing that you could take a crystal, a few wires, and an earpiece and construct a crude radio in high school science class. Today, very few people think about the silicon chips in their computer; we take the fact that a tiny crystal chip can bring a world of information for granted.

When we look at polarized water, we see a connected string of stable clusters, or simply put, a liquid crystal made up of tetrahedral molecules. Just think of a pyramid shape with four faces. Now envision eight of them put together. If you can envision that in your mind's eye, you will be struck by the amount of surface area a crystal like this will have.

Now, why is this important? This excerpt from Reader's Digest will explain:

"Suppose we have a cube of iron measuring an inch on each edge. The total surface area would be six square inches. The electrical charge is on the surface; therefore, the greater the surface, the greater the charge, and if we divide the cube of iron into smaller pieces we increase the surface areas.

By colloidal chemistry, that iron cube can be divided into particles so minute that they are invisible, hence instead of six square inches of surface emanating electric energy, we have something like 127 acres (or 5,532,125 square feet)."

This Reader's Digest excerpt was published in March, 1936. Today, scientists are manipulating nano-size objects. How small is that? A nanometer is one billionth of a meter, a human hair is 75,000 nanometers thick. Nanotechnology works in the range below 100 nanometers. Just as it's hard to imagine taking a 1-inch square iron cube and increasing its electrical charge to the size of 127 acres, it's hard to imagine the energy potential contained in something hundreds or thousands of times smaller than the thickness of a human hair!

Now, imagine a glasslike thread made of microscopic stable water crystals that runs like a map through the fabric of your physical body. These threads are more transparent to light than other tissues around them. Since these water crystals are electrically charged already by nature of their design and structure, like the crystal radio set, they can convey signals at frequencies as low as a single hertz. Change the frequency modulation (FM), and you'll get another station.

It is quite interesting how the stable water crystals of the meridians respond to light or photonic action. It has been discovered that meridians behave like optical fibers and can be made visible by the use of infrared imaging equipment.

We can now look at the meridians as if they were liquid fiber-optic threads woven in identical patterns on both sides of the body and up and down the center of the torso. In fact, the meridians that run up the back and down the front of the body, called the

governing vessel and the conception vessel, were visible in an infrared thermogram study done with volunteers at the Institute of Acupuncture and Moxibustion in Beijing.

There are many methods of stimulating the meridians. Moxibustion goes back centuries; the practitioner burn mugwort cones stuck on an adhesive medium over an acupoint located along a particular meridian. Heat is a form of electromagnetic radiation, which is constructed of photons. As the particles of light get excited, they cause a wave to develop, or you can say, an oscillation of the meridian.

Needles are used most commonly instead of moxibustion – thus the name acupuncture. Earlier methods simply used finger pressure on the designated points along the meridians. With science rapidly advancing, electric stimulation and laser light are replacing the ancient methods. In the newest, and most exciting emerging science, the field of nanotechnology, researchers have developed specifically designed informational molecular antennas that can be placed like small Band-Aids on the acupoints of the meridians.

So how does acupuncture assure the health of one's meridians? It does so by readjusting the flow of energy until it is balanced. This fine-tuning is done through energy holes or low electrical resistance points on the skin's surface. We refer to these holes as acupoints. When there is any type of stimulation on the specific spots, a vibration or wave is induced and travels along the meridian pathway to the organ system it is associated with.

The meridians, being constructed of an interconnected array of liquid crystals, generate electrical fields when stimulated due to their piezoelectric nature. Piezoelectricity is defined as electricity or electrical polarity due to pressure, especially in a crystalline substance. This is nothing new to physiologists who understand how bones generate electricity, but now we know that all the tissues are bioelectric.

James L. Oschman writes in "Energy Medicine: The Scientific Basis:"

"Biological electricity is a large-scale phenomenon arising from the movements of charged ions such as sodium, potassium, chloride, calcium, and magnesium. In virtually all cases, the electricity arises because of the large electrical polarity across cell membranes and the ability of these membranes to temporarily depolarize and then repolarize. This is the process that enables nerves to conduct signals from place to place within the body. A wave of depolarization also goes along a muscle cell and triggers it to contract.

"The large fields are measurable magnetic fields picked up from the heart, retina, muscles, and brain arise primarily because of electrical currents that flow as they carry out their activities. Less known but just as important are slow waves of electrical depolarization that are set up across the skin in response to injury. These

are called injury potentials, and they are important in triggering tissue repair.

“Biological electricity is widely studied by many different kinds of scientists, including electrobiologists, physiologists, and neurophysiologists. Much is known about the subject because electrical currents are easy to measure. In contrast, biological electronics is a relatively new subject of research. It deals with the flows of much smaller entities than ions. These are mainly electrons, protons, and the spaces where an electron is missing, called a hole.”

Here is where nanotechnology and acupuncture meet. They both “deal with the flows of much smaller entities than ions.” In acupuncture, low frequency is best, due to the low electrical impedance of the acupoints and meridians. It’s just like changing the radio frequency will give you a different station. Change the frequency going to an acupoint and you’ll change the effect on the meridian’s organ system. Remember, normal skin has six times more electrical resistance than the skin area where an acupoint will be found.

Resonance frequency on an acupoint can be quite effective at anywhere from 0.1 hertz to 100 hertz in electroacupuncture. If a Qi Gong master emits even a 0.1 hertz with his or her hand radiation, it produces a powerful healing effect. Likewise, when an acupuncturist manipulates a needle, it tunes the natural frequency of the meridian. The needle acts just like a radio antenna picking up on the signals on the airwaves.

Let’s step this down to a nano-level. Vibration will take place in molecules due to the fact that tension between the atoms and molecules works somewhat like a spring. The more powerful the tension, the stronger the rate of atomic vibration. At certain frequency levels, molecules can increase their vibration by absorbing photons.

If this influence rotates, say, an amino acid that then becomes charged, its rotation will emit an electromagnetic field that affects a second amino acid, and so on, creating an oscillating field pattern, a collective energy system.

Here is the good news from discoveries in the new science of nanotechnology: The infrared radiation present in your own body is enough to trigger the organic molecular antenna in the form of the LifeWave patch to send an exact message along the meridians and instruct your body to create the right internal environment for the highest levels of vitality and energy.

How is this accomplished? By a nanotechnology process in which atoms are linked in a particular pattern or arrangement in a compound that, once stimulated and activated by your body’s own infrared radiation, sends messages to the rest of your body.

In technical terminology, these are called stereoisomers or ionic compounds that have had their atomic patterns rearranged. This makes perfect sense due to the piezoelectric effect of crystalline substances.

These wireless infrared patch devices contain nano-structured biomolecular crystals. Certain organic materials have been selected because of their particular optical and electronic properties. Once the LifeWave patch is placed on the skin, the body's broad-spectrum infrared vibrations turn the system on. The nano-sized crystals in the molecular antenna begin to oscillate. Due to the optical and electronic properties of these materials, they are able to transmit specific signals back into your body.

Simply reflect on how the basic crystal set radio worked with a piece of quartz. By changing the crystal's very precise geometric shape, you will both generate and receive a specific signal. By changing the crystalline structure, you change the frequency band the radio operates in.

In order for the patches to talk to the body, they are placed on specific locations where the skin's electrical resistance is the lowest. These correspond to the acupoints. Now, the information signals generated by the organic stereoisomers are loudly heard by the body.

What the body hears and sees from the LifeWave patches is much like the technology used in infrared laser communication systems commonly employed by the military. The LifeWave patches use the wide-band infrared radiation coming off the body as both an optical power source and a carrier wave.

This is a perfect arrangement, since the nano-crystal antennas in the patches contain both photonic and semiconductor properties. This means that the nano-crystals are affected by light, and that the crystals also act to control the flow of a signal current.

A semiconductor is defined as a solid, like silicon (for example a tiny grain of sand), with a level of electrical conductivity between that of a conductor and that of an insulator. All that is needed for a semiconductor to oscillate and produce a current is heat. In this case, the crystals in the patch that act as semiconductors are turned on by the body's own heat and its infrared vibrations.