

# **The Evolution of Biomat Healing**

## **It's time for a brief history lesson.**

Lets go back, back, a way back to the beginning of man. If you believe in evolution the beginning of modern man started an estimated 60,000 years ago. If you believe in creation the beginning started at the Garden of Eden. Either way, at the dawn of man, our species was a creature of the sun. In the beginning we were hunters or gatherers or creatures of Eden. There was no air conditioning. Our bodies, our cells, were used to and needed the energy of the sun to maintain good health. In fact we evolved where we need the light of the sun to synthesize essential vitamin D among others to maintain good health.

Anthropologists have used mental capacity as a way of classifying pre-man with modern man. The pre-man brain as with animals past and present were able to process along with instinct two ways of being. One way of being was “Fight or Flight” (Sympathetic System). This is the mode characterized when an animal is threatened or has its back against a wall. In this mode the animal flees or fights for survival and all other biological or social functions (i.e. feeding or reproduction) discontinue. Only when “Fight or Flight” are turned off do creatures search for food, reproduce or engage in instinctual activity. We find this true in the higher brain as well. Ancient civilizations thrived intellectually and culturally only when not faced with annihilation by conquering armies, or devastated by drought or lack of animals to hunt. The “Rest and Relaxation System”(Parasympathetic) is present in man in the absence of “Fight or Flight” and is responsible for the massive growth of population, culture, economic and social evolution in civilized nations.

## **The Curative Power of Amethyst**

The Greeks in 400BC thrived as the greatest civilization on Earth able to operate in “Rest and Relaxation Mode” for many centuries. Conquering many lands and protecting their borders, they were able to build great halls of learning, and celebrated life and love with their many deities. One of their favorite deities was Dionysus. The God of wine represents not only its intoxicating power, but also its social and beneficial influences. He is viewed as the promoter of civilization, a lawgiver, and lover of peace, as well as the patron deity of agriculture and the arts. He was also known as the Liberator, freeing one from one's normal self, by madness or ecstasy.

Unfortunately, one of the side effects of courting Dionysus too closely is the hangover. In order to relieve its citizens of the dreadful morning after, Greek Healers found a curing gemstone. A curious purple rock they bequethed Amethystos – The Amethyst – literally translated as “Not Intoxicated”. These early physicians would lay patients on beds of amethyst, cover them with blankets of woven amethyst, sit them in caves where amethyst was present in the walls, or crush the stones into a powder and mix them into an elixir to be taken internally. The results were a calming, grounding and soothing affect delivered to their patients.

A few centuries later, in the east, holy men and physicians made it known the healing qualities of amethyst were characterized as purifying, pacifying and transitional. It was the gemstone which could easily transform one from “Flight or Fight Mode” to “Rest and Relaxation Mode”. Amethyst has the ability to transform lower energies into higher. Amethyst is known to calm and protect the mind. It soothes those who have engaged in constant rigorous mental activity. It has been deemed "nature's tranquilizer" by many healers because of its effectiveness in relaxing not only the mind but also the nervous system. Those who wear amethyst jewelry and who have been recommended to wear this stone for healing purposes have done so because of its tranquil qualities and its ability to reduce negativity and alleviate anxiety.

Amethyst was identified as a crystal that functions favorably in clearing certain types of blockage and in aligning the Chakras. By transforming energies on all levels amethyst also has the ability to balance and stabilize energies located within certain Chakra areas. Amethyst is related to and found to heal and align ailments of the 6th and 7th Chakras, which are the Third Eye or Brow (6th) and the Crown (7th).

Amethyst aides the 6th Chakra, Third Eye, by opening and heightening awareness. Its calming qualities help to awaken and ease stress in this area. It helps to also heighten perspective and allows development of strong introspection (inner-self view).

The 7th Chakra, or the Crown controls the energies used in any mental activity. Amethyst helps to relieve strain or tension in this area. It is considered a helpful aide in meditation and in the facilitation of psychic visual enhancement. Its tranquil sobering effect allows those who are energetic to relax. It also is a cure for insomnia and nightmares.

As the Greeks gave way to the Romans, the Huns and finally the Europeans of the later centuries, modern science took apart the Amethyst. It is a form of SiO<sub>2</sub> (Silicone Oxide) and gets its predominantly violet color from alternate layers of right-handed and left-handed quartz. Its hardness is rated a 7 on the Mohs scale with 1 being Talc (Chalk) and 10 being a diamond. This explains why it fractures quite easily and that it is rare to find large cuts of Amethyst Jewelry anywhere in the world. Thus Amethyst has an irregular pattern in the quartz world and produces some yet scientifically unexplained characteristics with its refraction, conduction and emission of light. Recently it has been discovered that the violet color is attributed to certain iron constituents in connection with a naturally occurring ability to store and radiate light over time. Maybe scientists found out what the early healers already knew.

## **Modern Times**

On December 13, 1958 America sent Gordo into space on the Jupiter AM-13 spacecraft. Able and Baker went into space on May 28, 1959 on the Jupiter AM-18 mission.

What scientists learned from these historic flights was that conducted heat alone was not enough to keep these monkeys happy in the extreme cold encountered in the vacuum of space. In order to simulate the sunshine encountered on earth scientists designed a suit capable of producing Far Infrared Radiation to insulate the apes on future space missions. The apes came back more vibrant with better physiology than their predecessors.

Far Infrared Radiation (FIR), what is it about this energy source our bodies enjoy. Why is it that we feel so good in the warm sun light? What makes us feel good when another human touches us and we feel the heat and warmth of their touch?

Far Infrared Radiation is that part of the electromagnetic spectrum with longer wavelengths.

The visible light spectrum ranges from .4 microns to .7 microns in wavelength.

Ultraviolet, X-Rays and Gamma-Rays have much shorter wavelengths than visible light and cause destruction of organic molecules with exposures of any duration.

Near Infrared and Medium Infrared Light ranges from .74 microns to 4.0 microns in wavelength and is visible to some animals but is invisible to the human eye.

Far Infrared Light ranges from 4.0 microns to 400 microns and is harmless to organic molecules at the lower end of this range.

Beyond 400 microns are the Ultra-High Infrared, Microwave and Radio Wavelengths.

### **How does FIR transfer into heat?**

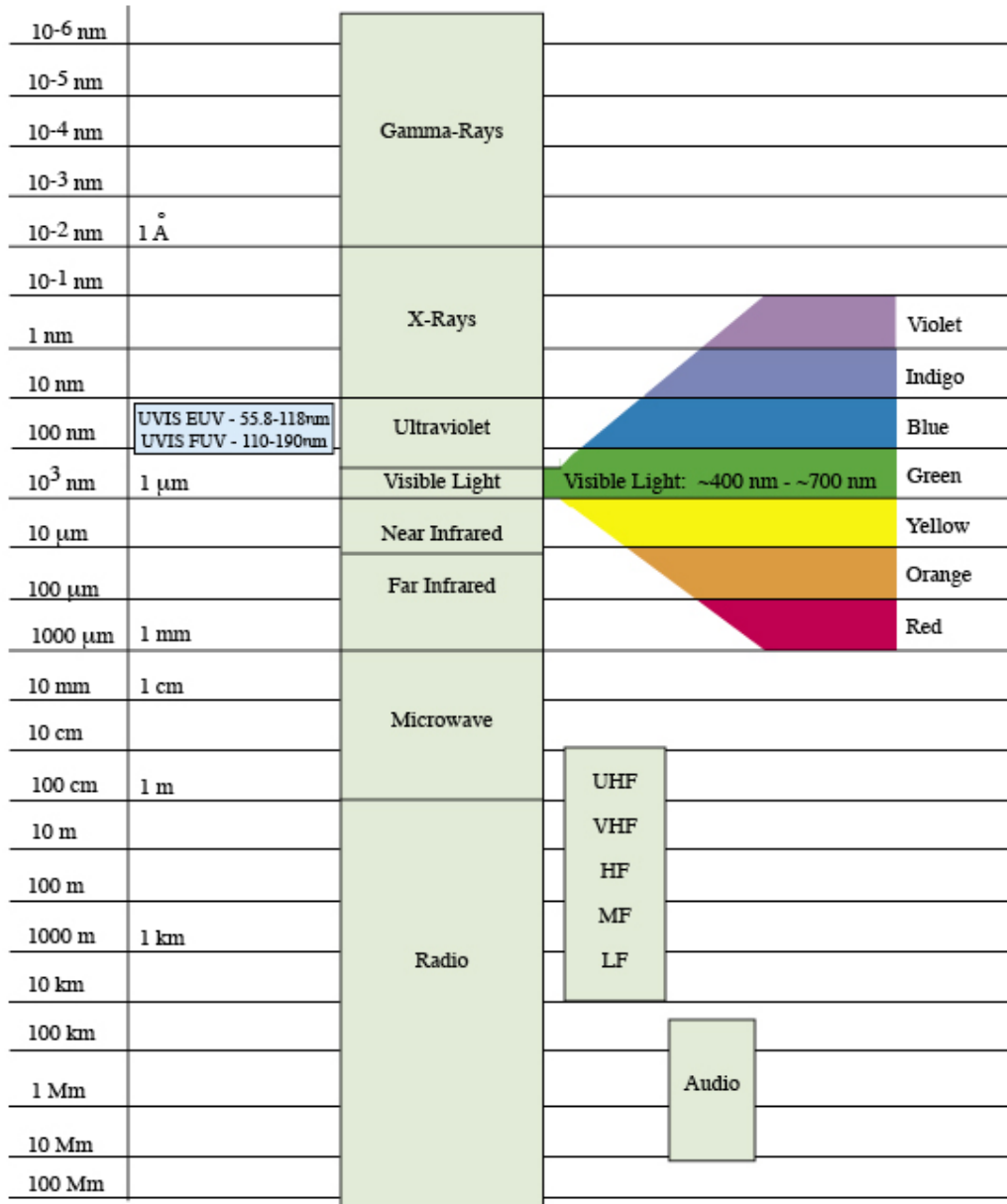
The laws of thermodynamics state there are three ways heat can be transferred.

- 1) Conduction – Heat traveling from an area of high temperature to an area of low temperature within an object.
- 2) Convection – Heat circulation in an atmosphere of water or gas.
- 3) Radiation – Electromagnetic transfer even within a vacuum.

Radiation is different from the other two because with Conduction and Convection the medium must be heated before transfer may begin. Radiation transmits heat directly and spontaneously. Radiation does not need a carrier.

# The Electromagnetic Spectrum

Chart by LASP/University of Colorado, Boulder



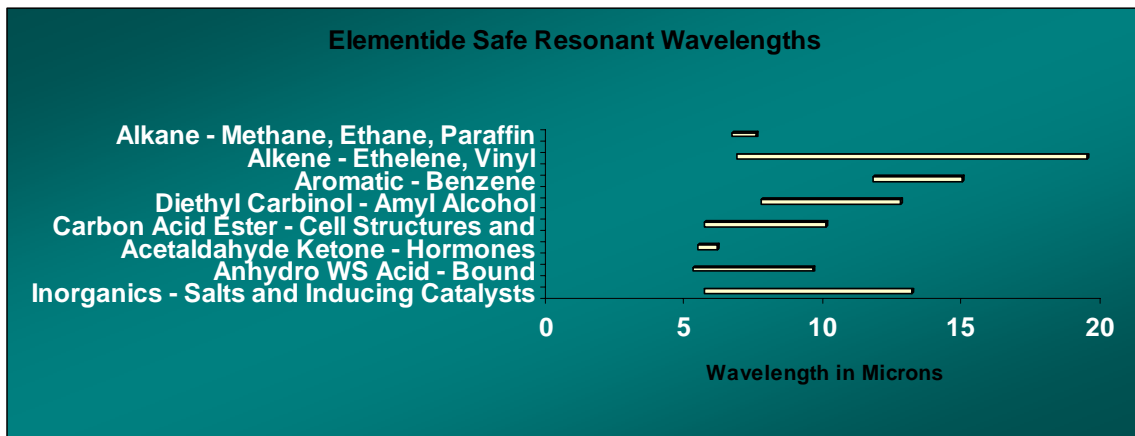
nm=nanometer, Å=angstrom, μm=micrometer, mm=millimeter,  
cm=centimeter, m=meter, km=kilometer, Mm=Megameter

## How does FIR create such a deep heating in the body?

Molecules that form an object have different vibration and rotation cycles depending on many subatomic principles. These rotations and transmutations of Carbon and Oxygen containing and organic molecules in the body tend to resonate at regular cycles. This resonance is much like the frequency of a swing moving back and forth. When these molecules encounter an FIR wavelength of a resonant frequency it is much like giving that swing a push at exactly the right moment to project it further or make it more energetic. This phenomenon is called “resonant absorption”.



Compounds containing Nitrogen or Chlorine do not resonate at the same frequencies as FIR and thus do not heat up or become more energetic as they encounter FIR.



The Biomat Produces FIR in a wavelength from 5 to 15 microns.

By observing the chart above it is apparent most compounds in the body cannot resonate with low or medium infrared nor infrared much above the range emitted by the Biomat.

Because of the Resonant Absorption property of FIR the heating penetration is much deeper than through absorption and convection and greater still if the FIR source is in contact with the body as with the Biomat.

### **So what are the Physiological effects and health benefits of laying on the Biomat and receiving FIR Therapy?**

#### **1. Stimulation of the Autonomic Nervous System**

- a. The Autonomic Nervous System controls homeostasis, that is the constancy of the body i.e. Heart pumping, body temperature, breathing, volume of fluids etc.
- b. Symptoms of ANS malfunctioning include headache, dizziness, weakness, insomnia, cold body parts, overactive sweating, fatigue, inflammation and cancer.
- c. Much like acupuncture or acupressure, FIR entering through all of the conductivity points at once energizes the ANS and helps to remove any blockages helping to insure open communication pathways between the brain and all of the organs of the body.

#### **2. Stimulation of the Circulatory System**

- a. The circulatory system provides nutrients to all of the cells through Arteries, Veins, Lungs and Capillaries and other organs.
- b. Symptoms of a poor circulatory system are high blood pressure, arrhythmias, shortness of breath, and pain or loss of feeling in the extremities.
- c. By taking the deep heating effect of FIR, capillaries dilate and blood circulates more freely. This in turn prevents metabolic disorder such as blood stasis, activates tissue cells, activates secretion of enzymes and frees toxins and metabolic wastes for excretion.

#### **3. Stimulation of Sweat**

- a. Sweat helps to secrete toxins from subcutaneous fat layers under the skin
- b. Symptoms include cancer, pain, muscle tightness and fatigue
- c. Sweat helps to secrete heavy metals, carcinogens, food processing agents, lactic and free fatty acids, and surplus salt trapped in subcutaneous fat layers. This is especially important for people unable to exercise.

#### **4. Other benefits in using The Biomat and FIR Therapy**

- a. **Reduction of Stress** due to increased circulation and downtime used while spending time on the mat.
- b. **Relief of Fatigue** due to increased circulation and emission of lactic acid from muscle tissue.
- c. **Relief of Stiff Muscles** due to increased circulation and secretion of lactic acid from muscle tissue.
- d. **Soft Tissue Repair** due to molecular level rebuilding processes increased enhancing DNA synthesis through all stages of repair

- e. **Relief from Arthritis** due to increased circulation around joint areas and an increased metabolic rate and downtime allowing the body to furnish building components for cartilage repair.
- f. **Immune System Boost** due to simulation of infection causing an autoimmune reaction.
- g. **Lower Blood Pressure** due to the increased area of capillary, arteries and veins.
- h. **Weight Control** due to the breakdown of toxins, salts, acids and lipids stored in subcutaneous fat layers.

## What about Negative Ions?

Negative ions are what make a person feel so good. Positive ions make a person feel slow and sluggish. Why is this? What are negative ions?

In an electrical circuit electrons move from the negative pole to the positive pole. The positive ions of the wire stay put while the electrons jump from positive ion to positive ion across the wire. The electrons or negative ions move, while the positive ions stay put. Active vs. sluggish.

In the column of atmosphere surrounding the earth cosmic rays from the sun strike the atmosphere and ionize the gasses. This causes the gasses to break up into negative ions and positively charged particles. Electrically, the sky has positive potential with respect to the earth's negative ground potential. Therefore, the positive ions will be attracted to the ground and the negative ions will travel upwards toward the clouds in the sky. Both ions affix themselves to dust particles carrying them towards the ground or upward into the atmosphere. In this way the earth cleanses itself.

Near the surface of the earth, there are more positive ions than negative ones. However, there is a dissipating effect as the positive ions are spread thin along the negatively grounded surface.

When a column of water sits on the earth as in an ocean, lake, or river, the positive ions are attracted to the earth at the bottom of the water column leaving the negative ions on the surface. As waves crash on the shore, since the waves are on the surface, these negative ions spray pedestrians on the shore giving them a wonderful feel good sensation.

## Negative Ions and the Biomat

The Biomat creates 600 to 1,000 volts of negative potential much like the earth is a ground. When this is applied to an insulated body it causes more sodium, potassium, calcium and magnesium to become ionized in the blood, thus increasing its alkalinity. Since there is no current involved with this negative potential, there is no danger of electrocution or electromagnetic wave toxification.

Cellular function is dependent upon motion of ions through ion channels. One of the most prevalent ion channels in all cells is one that simply exchanges 2 sodium ions from within the cell with 1 potassium from without. This creates a net negative 1 charge within the cell helping to alkalize it. Alkalization of the cells is important to help neutralize and eliminate the toxic acidic waste created by normal cellular growth and reproduction and is thought to be the primary cause of aging. The ionization of these reactive light metal ions also allows for movement of free carbonate in the blood which is also a primary factor in eliminating toxic wastes. Therefore, the negative ion properties of the Biomat help to detox the body in a major way.

Another aspect of the Negative Ion Properties of the Biomat has to do with the way the body sends electrical signals through its nervous system. These impulses are also based on a sodium/potassium exchange principle. Once again with the availability of so much free potassium, magnesium and calcium caused by the negative ion generator of the Biomat, electrical impulses are generated throughout the nervous system all at once. This is most likely the cause for that tingly feeling one gets when laying on the Biomat. This electrical flushing out of the nervous system helps to relieve any blockages present and is what may be responsible for releasing so much serotonin which is what gives such a prevalent feeling of well being one gets while receiving a treatment on the Biomat.