

# BIOMAT Medical & Scientific Facts

## *With Far-Infrared, Negative Ions, & Amethyst Crystals*

US FDA Medical Device: # 2954299

The Richway Bio-Mat combines state of the art Far-Infrared Light and Negative Ion Technology with the healing power of Amethyst to deliver top notch professional therapeutic results. The Bio-Mat is approved by the FDA as a medical device for the following functions:

1. **Improves Circulation & Cardiovascular Function**
2. **Improves Immune System Function**
3. **Relieves Pain**
4. **Burns Calories and Controls Weight**
5. **Eases Joint Pain and Stiffness**
6. **Reduces Stress and Fatigue**
7. **Improves Skin**
8. **Removes Bodily Toxins and Assists in Detoxification**

Many insurance companies consider the Bio-Mat a viable treatment option for pain as well as other musculo-skeletal problems. The Bio-Mat delivers the benefits of a Far Infrared sauna for a fraction of the price. The Bio-Mat is a totally unique medical device producing both Far Infrared as well as generating 6.8 microns of Medium "Human" Infrared. According to NASA research, Human Infrared normalizes a variety of important physiological functions, especially glandular functions. This **Human Infrared** feature of the Bio-Mat makes it different from any other infrared device on the market.

In addition, traditional infrared saunas and devices utilize 120 volt AC current. AC current has been proven to be highly detrimental to human health. AC or alternating current disturbs the human biological field. The Bio-Mat protects your body from the harmful AC current by providing a 5 tiered buffering system in which the AC current is **converted to DC** (direct current) which is bio-electrically compatible with the human body.

The Bio-Mat also delivers *Negative Ions*, energizing the body for optimal health. The **Negative Ions** delivered through the Bio-Mat are delivered directly to the body through the skin's surface via conduction. This greatly differs from ambient air ions delivered through the popular negative ion generators used for air cleaning, which NASA reported only positively effecting 25% of people. The direct conduction of negative ions allows for an immediate response and change in the body's electrical field for 100% of the people, whereby cell channels are activated for a rapid return to the body's optimal physiological state.

The Bio-Mat is further enhanced with *Amethyst Crystals*, known for their calming and healing effects since ancient times. The Bio-Mat is a revolutionary healing tool, ideal for health care professionals or anyone interested in improving their overall health and well-being.

The "Amethyst Effect" was scientifically demonstrated through spectral analysis demonstrating a change in infrared light when refracted through amethyst crystals. Scientists experimented passing far infrared light through a variety of substances, including various gems, glasses, and plastics. **Amethyst** was found to be the only substance which clearly changed the spectrum of infrared light.

The field of Far Infrared Crystallography explains this effect in further detail. FIR refracted through *amethyst* crystals organizes FIR into geometrical patterns with **higher bio-compatibility**. Korean researchers propose that addition of the amethyst allows for greater increase in the utilization of the light by the human organism.

Far Infrared Rays (FIR) penetrate 6-8 inches into the human body. These rays not only benefit the skin and muscle tissue on the surface of the body, but penetrate into deeper tissues. The FIR penetrates into the lymph glands, blood vessels, nerves, as well as key organs. The rays optimize the health of these tissues in a number of ways. First discovered by NASA, Scientists propose that among the energy spectrum coming from the sun, that the Far Infrared Ray waves are by far the safest and most beneficial electromagnetic energy available for the human body, directly affecting all metabolic and cellular functions.

### THE SUPERIOR HEALTH BENEFITS OF THE BIO-MAT

#### **1. Improves Circulation & Cardiovascular Function**

Far Infrared Waves raise body temperature warming the blood and expanding the blood vessels. There is an increase in peripheral blood flow and volume, resulting in improved circulation and heart function.

#### **2. Improves Immune System Function**

Far Infrared Ray's deep heat raises your body temperature, inducing an artificial and healthy fever. As the body works to combat the "fever," your body's immune system is activated and strengthened. Combined with the detoxification of harmful toxins and waste products, your overall health and resistance to disease is improved greatly.

#### **3. The Bio-Mat Relieves Pain**

The deep heat of far infrared helps peripheral blood vessels dilate, bringing relief and healing to muscles and soft tissue injuries. Increased blood circulation carries off metabolic waste products and delivers oxygen rich blood to oxygen depleted muscles, so they recover faster.

#### **4. The Bio-Mat Burns Calories and Controls Weight**

As you relax in the gentle heat of Far Infrared your body is actually hard at work, producing sweat, pumping blood and burning calories. According to a Journal of the American Medical Association report, a single far infrared session, burns as many calories as rowing or jogging for 30 minutes.

#### **5. The Bio-Mat Eases Joint Pain and Stiffness**

Far Infrared heat therapy is widely used to treat patients suffering from many kinds of arthritis and musculo-skeletal disorders. In addition, it has been proven effective in the treatment of sprains, neuralgia, bursitis, muscle spasms, joint stiffness and many other musculo-skeletal ailments. Stiffness, aches and soreness that come with aging are reduced or eliminated using FIR.

#### **6. The Bio-Mat Reduces Stress and Fatigue**

The gentle warmth of the far infrared rays helps to sooth nerves and relax tight or knotted muscles. The end result is reduced stress and improved energy.

## 7. The Bio-Mat Improves Skin

The Bio-Mat's Far Infrared and Negative Ions penetrate the skin deeply, helping to detoxify impurities from the skin and lymph. In addition, exfoliation is greatly enhanced by the Far Infrared, rapidly removing dead skin cells. Increased circulation draws your skin's own natural nutrients to the surface, rejuvenating your skin's health and appearance.

## 8. Removes Bodily Toxins and Assists in Detoxification

Far Infrared helps to detoxify the body in several important ways. Increased blood circulation stimulates the sweat glands, releasing built up toxins and waste. Daily sweating can help detoxify your body as it rids itself of an accumulation of potentially carcinogenic heavy metals, alcohol, nicotine, sodium, sulfuric acid, cholesterol, and uric acid. In addition to sweating, far infrared is capable of removing toxins via several other bodily systems.

## EFFECTS OF DIRECT CONDUCTION NEGATIVE IONS

### Blood Alkalization & Blood Purification

When negative ions are applied to the body, the Calcium and Sodium circulating in the blood are ionized. This changes the blood pH into an alkaline state and has an overall alkalinizing effect on the body. The normal pH of human arterial blood is approximately 7.40 (normal range is 7.35-7.45), a weak alkaline solution. Blood that has a pH below 7.35 is considered "acidic", while blood pH above 7.45 is alkaline. Proper blood pH is essential for optimal health. It has been noted that the negative ions applied to the body are helpful at regulating blood pH.

### Reviving the Cell

When the amount of negative ions in the blood increases, there is an increase in inter-cellular communication. Cellular metabolism is facilitated, and as a result there is an increase in cellular nutrient uptake and cellular hydration. In addition, cellular waste materials are more efficiently excreted. With the increase in cellular metabolism, optimal cell function is rapidly revived. Further information is found in the Nobel Prize in Physiology (1991) for the discovery of ionic channel function.

### Diseases Associated with Ion Deficiencies

Indoor environment, city living, cars, exposure to electronic devices, EMF's (electro-magnetic fields), and environmental pollution all result in increased positive ions in one's body, tilting the ratio of ions towards the positive. This results in a physiological imbalance, which may have detrimental health consequences. Too few negative ions in our body can cause a number of diseases. Some of the health problems associated with an imbalance of ions in the body include: anemia, allergies, shoulder pain, lumbago, rheumatism, neuralgia, headaches, kidney problems, imbalanced autonomic nervous system function, insomnia, and fatigue.

## THE ORIGINAL BIO-MAT DIFFERENCE

The Bio-Mat is different from any other Infrared or Negative Ion generating device on the market. Two other common products existing on the market at this time: the Aesta Mat and the Vita-Mat. Sellers of these mats claim they are equal and deliver the same benefits for a lower price. This is quite misleading. First,

the Bio-Mat is the original mat and the other mats were created by competitors in an attempt to duplicate the technology for a lower price. One manufacturer even claims to produce their mat in the same facility where the Richway Bio-Mat is produced. The Bio-Mat differs from the Aesta Mat and Vita-Mat in the following ways.

- 1) 6.8 Micron Infrared** – Bio-Mat generates a special spectrum of photon infrared at 6.8 Microns through a special sensor which amplifies the amount of 6.8 infrared exposure. The benefits of 6.8 micron Infrared or "Human" Infrared are described in an earlier section. The Vita-Mat or Aesta Mat do not have this additional sensor and so do not deliver the extra benefits of 6.8 micron infrared.
- 2) 10 Hz Infrared** – The Bio-Mat includes another sensor which generates 10 Hz infrared. World renown scientist Dr. Chian, of China has demonstrated that 10 Hz IR acts as an information carrier when passed through various materials, including human and animal DNA, pheromones, as well as gemstones such as Amethyst. Bio-Mat's with 10Hz IR sensors were tested along with a control group of Bio-Mat's without the 10 Hz sensor. The most potent healing effects occurred only under the group with the 10Hz sensor. This means that infrared alone was not responsible for the healing, but rather the addition of information being released from the Amethyst as hypothesized by researchers. As one Korean Research scientist said, "It appears that with infrared we are talking about energy, but with the addition of amethyst, and the 10 Hz IR, we are now talking about energy plus healing information. This is the critical difference between the use of infrared saunas, infrared mats (without 10Hz infrared or amethyst) and the Bio-Mat". This may explain why so many reports of healing have occurred over the 16 year history of the Bio-Mat. Consumer beware, the other mats do not contain this sensor.
- 3) Bi-Metal** – Bio-Mat uses the highest quality Bi-Metal in its mats. Bi-Metal is used inside Infrared Mats as a heat sensor to control heating functions within the mat. The Bi-Metal can break over time with usage, rendering the mat ineffective. Whatever mat you choose to purchase ask your seller about the quality of the Bi-Metal used in the mat, and ask about the warranty. There is only one type of 'High-Quality, Long-Durability Bi-Metal' sold on the market today. This Bi-Metal is manufactured by Texas Instruments and was originally developed for military usage. The Richway Bio-Mat is the *only* company that has access to and uses this high quality bi-metal in their mats. This means a guaranteed longer life of the mat, reflected in Richway's warranty and repair policies. The additional cost of the expensive Bi-Metal is one reason why Richway Bio-Mat's are more expensive, in addition to the inclusion of the 6.8 micron sensor, the 10 Hz IR sensor, and Amethyst. In addition, Richway recycles all of the Bi-Metal from its mats. Consumers are free to choose their products but should be first educated about the differences between the existing products.

	BIO-MAT	Aesta Mat	Vita-Mat
High Quality Bi-Metal	✓	-	-
10HZ IR Sensor	✓	-	-
6.8 Micron Sensor	✓	-	-
Amethyst	✓	-	-

Transform your health, your body, and your life. Order your Bio-Mat today.

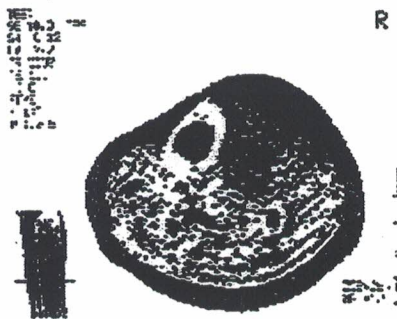


Fig. 1. After 30 minutes exercise; dark parts indicate muscle fatigue (due to build-up of lactic acid)

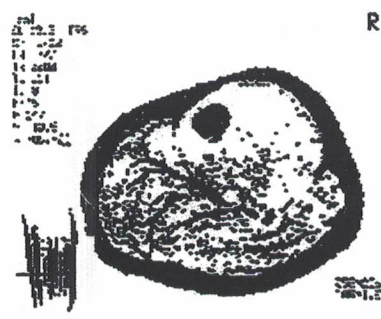


Fig. 2. Instead of the usual 2-3 hours, the FAR Infrared products help muscles recover within 20 minutes only

Based on my colleague's recommendation, and my curiosity, I have tried some of the products personally, and have found benefits on physical ailments, as well as emotional and athletic benefits. At this point, I had decided to look further into the explanation behind the miracle benefits.

### Staying healthy and youthful - beyond exercise and nutrition

Dr. Zane Kime, M.D., in his book "Sunlight"<sup>6</sup> holds up the findings that sunlight exposure is similar to physical exercise in its effects on the body, as it improves the balance of blood pressure, blood sugar, and an increase in oxygen in the cells, muscle strength, vitality and mental stability. Natural spectrums of light found in sunlight, for example, are essential for bone growth as well as preventing osteoporosis, regulating hormonal functions as well as immune functions. It has occurred to me that light may be a great help to patients who cannot exercise, because of health reasons, age, or lifestyle inhibitions.

### The Anti-Aging Factor

As we age, we all experience a shift in our hormones, and researchers now feel this change is responsible for many of the maladies we associate with aging, such as menopause, sleeplessness, fatigue, arteriosclerosis, and others. In his research in Pennsylvania at the Thomas Jefferson Medical School, Dr. George Brainard has stated that light affects the hormonal balance of the body, in levels of melatonin, prolactin, cortisone, testosterone, TS4, LH, FSH, T3, and thyroid hormones. John Ott, a modern pioneer in this subject, attributes these affects to a process similar to the photosynthesis process in plants. In this process, light is converted by the body into electrochemical impulses that are sent to the pineal and pituitary glands, which send the hormones through the body's central nervous system to all the cells of the body. The hormones affected through this process and the functioning of these glands are the growth hormone, thyroid hormone (TSH), adrenocorticotrophic hormone (ACTH), prolactin, oxytocin, melanocyte stimulating hormone (MSH), and anti-diuretic hormone. Therefore, light is essential to the functioning of our entire endocrine system.<sup>7</sup> As hormone replacement has mixed results at times, it is possible that in the future, doctors will prescribe light for therapy, in forms such as the FAR Infrared wraps.

Common problems associated with lifestyle and aging, such as hypertension and osteoporosis, headaches and digestive problems, are attributed by some scientists to be the result of excess acidity in our system. The American Medical Journal found that in patients with bone loss, alkalizing their system caused a decrease in bone loss. Their conclusion was that our typical American diet is acid-producing.<sup>8</sup> The acids deposited in our blood are often stored by the body in forms of cholesterol, fatty acid, uric acid, and other villains that cause havoc in our system.<sup>9</sup> Sang Whang,

the author of "Reverse Aging" claims that these excess acids can be eliminated with the use of far infrared products, along with consuming certain alkaline minerals and foods.<sup>10</sup> The far infrared resonance heats up the internal temperature of the body, increasing circulation, thus enabling the blood to melt out the acidic toxins that have been deposited for years in one's arteries. A study done on carotid artery buildup showed an increase in blood flow within the artery after two nights of the subject sleeping on the FAR Infrared mattress, for an average of 10 hours a night.<sup>11</sup> As a doctor, I cannot recommend the wraps, as they are not FDA approved in this country as therapies for these particular maladies. However, if I were personally a sufferer of hypertension, or chronic arthritis, or any systemic problem, I would use the FAR Infrared mattress or wraps for my own health.

### **Negative Ions**

The other element contained within the FAR Infrared technology that I investigated was the negative ions that were claimed to increase with the use of it. Nature's "life enhancing particles", negative ions, are molecules with an extra electron, discovered in 1899 by two scientists named Elster and Geitel. Mice live longer in certain cases when exposed to negative ions. They have been linked to killing germs, and preventing infections. Dr. Igbo Hart Komblueh, a physician, found that patients recovered 57% faster from surgery when exposed to large doses of negative ions. It has also been found that negative ions seem to help with allergies, migraines, and sinus problems.<sup>12</sup>

Although negative ions are plentiful in nature (occurring at almost twice the amount near the ocean or waterfalls as normal), our environment is sadly lacking these energetic boosters. Dr. William Rea, Chief of surgery at Brookhaven Medical Center in Texas, states that "Most houses don't breathe like they used to". Steel and concrete absorb most of the available negative ions in the atmosphere, and plastics have a positive static charge, so that the amount of negative ions that we receive is extremely minimal.

Emotional problems? Blame it on the ions, or the lack of them. The opposite of negative ions, positive ions, are particles with a missing electron. In certain courts, the issue of winds that bring in positive ions has been used as an excuse for erratic and criminal behavior. On the contrary, negative ions promote alpha brain waves, creating a calming effect. Dr. Albert P. Krueger, an American scientist well respected for his extensive work with ions, discovered that negative ions affect the rate at which serotonin is oxidized in the bloodstream. Serotonin is secreted by the pineal glands and intestines, and affects sleep, mood, nerve-impulses, blood-clotting, and contraction of smooth muscles. It is most popularly associated with feelings of security, peace, and satisfaction. Negative ions have been shown to reduce neurosis and anxiety.<sup>13</sup> This may explain why so many people sing in the shower, or why one can't seem to fully wake up without one. When the water falls in the shower, it creates negative ions. Negative ions are also found plentifully around waterfalls and oceans. Vasil'yev, a Russian ion pioneer, showed in the 1970's that ions act on the endings of pulmonary afferent nerve fibers, and alter the functional state of the central nervous system, and through it, the peripheral organs.

The FAR Infrared material that I research also was shown to increase the rate of negative ions. This should be a relief for all of us who don't live or work at waterfalls or on the ocean shore. The people that I interviewed seemed to notice the calming effect of wearing the wraps, although they weren't told of this effect prior to wearing them.

As I approach my upper years, I am elated to use technology such as this to enhance my daily life, and increase my chances of living healthy long past my 90th birthday. I hope that you have the same opportunity.