

## **Reversing The Aging Process - an Enlightened Doctor's Discovery**

©Copyright 1999 by Dr. Fouad I. Ghaly, M.D.

"Are you expecting me to believe that a spectrum of sunlight can cause healing for pains in joints and muscles, as well as lower cholesterol and slow down aging? It seems a little far-fetched to me." I held back harsher criticism only out of respect for my colleague as our conversation continued. He seemed undaunted by my skepticism. "Out of nine of my patients with chronic knee problems, in the eight that I applied the FAR Infrared knee wraps on, I have seen a dramatic improvement, three of whom are completely pain free. How would you explain that? Another patient who suffers from extreme intestinal dysbiosis has recovered, and several of my elderly patients with spinal problems have reported improvement in range of motion and relief from pain using a FAR Infrared waistwrap. I myself have tried it. My shoulder doesn't hurt when I apply compresses of the same material, even after a long day at work. My family and friends have noticed a change in my energy levels, as well as my personality. I feel ten years younger!"

"Listen, I know you're excited, and it sounds impressive, but is this just a new gimmick? Are you sure it's not all working because you want it to work?" Understandably, I have to qualify information that comes to me. At this point in my career, I am getting accustomed to these calls. It seems that the medical field itself is going through a transition, and the doctors I associate with are increasingly more interested in non-traditional methods, as long as the treatments work. Many of my patients also often enlighten me on alternative perspectives on health. Over the years, I have witnessed the limits of my expertise in chemical and surgical procedures and medications for certain conditions. Therefore, although I am still a sound supporter of allopathic medicine in the treatment of contagious diseases, I am perpetually intrigued to find new ways to expand my abilities to help my patients.

Still, his claims did seem a little too incredible to be true, and I immediately shelved it in my mind under "U" for unbelievable. Yet, my investigative mind spurred me to embark on a search for more quantifiable research on far-infrared light and negative ions, both of which were key factors in the effectiveness of the wraps being used. The following is a limited report on my findings:

### **Light Medicine of the future?**

Light medicine has been a topic well documented since the early 1900's. Even as far back as 1870, Dr. Pleasanton, a researcher in the United States, published research showing the relationship between light frequency and the

rate of growth of cells and tissues, as well as their rate of cell division.<sup>1</sup> Specific wavelengths affect our metabolism and our aging process, according to "enlightened" scientists. Dr. Harry Riley Spitler, M.D., O.D., proved in his book that light plays an important role in regulating the autonomous nervous system, as well, pointing out how certain spectrums of light are crucial to our daily wellbeing, emotionally and physically.<sup>2</sup>

Previously, I was only familiar with laser light treatments used to tone and rejuvenate skin, reducing lines and improving blemishes. I am more interested at present in the beneficial effects of the application of specific spectrums of natural light for overall health. One study presented by Dr. Zane Kime, M.D., stated that sunlight is a leading factor in strengthening the body's resistance to infectious diseases, increasing the oxygen capacity of the blood, and improving stress tolerance. Laboratory experiments supporting his study show that exposure to sunlight increases lymphocytes and neutrophils, and reduces the frequency of colds and respiratory infections.<sup>3</sup>

Dr. Richard Wurtman, Professor of Endocrinology at Massachusetts Institute of Technology, stated that wavelengths of light are almost as important as vitamins and minerals to the body's proper functioning.<sup>4</sup> Without proper nutrients or oxygen, our body suffers. How much so also does our health suffer considering our modern life, with our severe lack of natural light?

### **What is the Healthiest Spectrum of Light?**

Unfortunately, the wavelength of light that is the most beneficial to the body is often the one we are exposed to the least, due to pollution and everyday lifestyle. The spectrum of light that appears to be most resonant with cell tissues seems to lie within the far infrared spectrum. Studies suggest that far infrared light stimulates the production of cell tissue and rapidly promotes the regeneration of skin and blood tissue in areas exposed to it.<sup>5</sup> This could also prove to be especially helpful in the recovery of wounds and following surgery in preventing the formation of scar tissue.

One of the first pioneers in the field was Dr. Neils Finsen, who was curing lesions and variola using red and infrared rays. More recent research performed by Tiina Karu, M.D., of the Laser Technology Center in Russia, holds that this spectrum of light speeds up cellular metabolic processes, like stimulating the activity of mitochondria, and triggering enzyme activity as well as the healing, regeneration, and normalization of damaged cell tissue. Obviously, although we can receive this light from spending time in the sun, excessive exposure to certain rays, such as Ultraviolet Rays (UV) in sunlight can be damaging to our system. I see it in my patients who have spent years baking on the beaches.

The first research on isolating, or mimicking far infrared light was done through NASA decades ago. Recently, several scientists in Japan extended this technology, and designed a way to create fibers to be worn on the body that emit wavelengths the same as natural far infrared light from the sun, yet much more concentrated. The material itself was formed primarily out of several minerals with piezoelectric qualities, such as tourmaline and serpentine. The raw materials were highly costly, so the technology was not popularly used.

A breakthrough in 1994 caused the production of the "FAR Infrared" wraps that my associate had been using with great results. A textile engineer discovered how to mix the piezoelectric substances with a mineral oxide without minimizing the beneficial effects that the substance had on the body. A separate discovery was made in which the fibers themselves could be minimized in size (quite possibly one of the smallest diameter fibers created to date, being several times thinner than human hair). This maximized the amount of surface area, thus amplifying the amount of energy within a limited area of material. Therefore, even a thin, wearable wrap could be easily worn undistinguished under clothes, and comfortably worn. These FAR Infrared wraps were created for use on the following areas: Waist wraps, for digestive region and backaches, knee wraps, elbow wraps and wrist wraps for use on areas prone to joint and muscle injuries, and ankle wraps, which have been reported to be beneficial for foot problems as well as swelling or poor circulation. The manufacturers even created a blanket and mattress to generate the far infrared benefits to the entire body while sleeping, or relaxing.

I have found several studies that suggest the benefits of using far infrared light on injuries: The American Journal of Geriatrics has published a study in which elderly patients experienced an improvement of pain and disability from degenerative osteoarthritis of the knee. A fully randomized, partially double-blind trial resulted in a pain reduction of more than 50% within the group using the therapy, whereas there was no significant improvement in the placebo group. Studies done with Magnetic Resonance Imaging suggest a more rapid recovery from muscle fatigue, as you can see in the images.

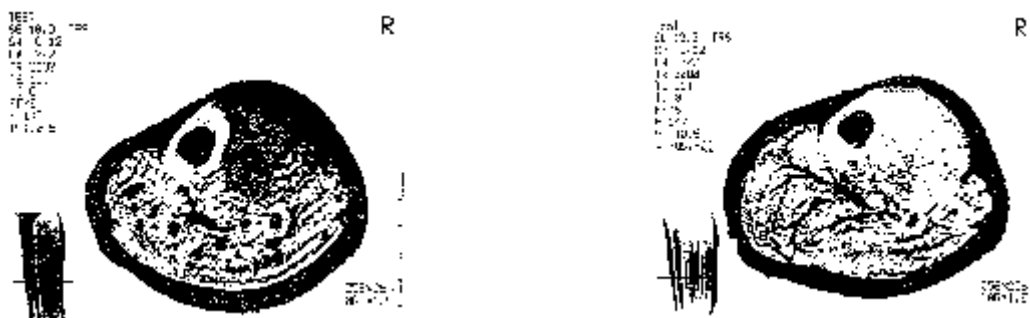


Fig. 1. After 30 minutes exercise;  
dark parts indicate muscle  
fatigue (due to build-up of lactic acid)

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, oxytoxin, 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 Kornbluh, 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.

## References

1. Articles on Light Therapy
2. The Syntonic Principle, 1941, Harry Riley Spitler, M.D., O.D.
3. Sunlight, Zane Kime, M.D., Pengrove, CA, World Health Publications, 1980
4. Articles on Light Therapy
5. Ibid, pg 278
6. Sunlight, Zane Kime, M.D., Pengrove, CA, World Health Publications, 1980
7. Articles on Light Therapy, pg261
8. New England Journal of Medicine, Volume 330, June 23, 1994
9. Reverse Aging, JSP Publishing, Sang Whang 1990

10. Ibid

11. Mitsui Hospital Research Lab, Japan

12. Negative Ions, Vitamins of the Air? Jim Karnstedt and Don Strachan

On the web at:

[http://www.doctorshealthsupply.com/infrared/health\\_facts.htm](http://www.doctorshealthsupply.com/infrared/health_facts.htm)