

Life, Electromagnetic Energy and Your Well-Being

“What we are doing is bringing *energy* back into the living system.... What is emerging is a new paradigm of life, energy, and medicine.”¹

- Dr. Robert Becker, Nobel Prize Nominee

Abstract

The TESLAR[®] technology, while utilizing electromagnetic field principles, is otherwise unrelated to magnets, medallions or copper bracelets. The TESLAR[®] technology is an active technology that produces an oscillating signal which helps to strengthen and reinforce the body's own energy field. TESLAR Inside Corporation makes no representation of or comparison to magnets or other similar passive devices.

Part 1 - The Science of Mind and Body

- ◆ **What is Mind-Body Medicine?**
- ◆ **‘Energy’ and Mind-Body Science**
- ◆ **Natural Electromagnetic Energy**
- ◆ **The Dangers of Electromagnetic Pollution**

Part 2 - The TESLAR Technology

- ◆ **Scientific Research**
- ◆ **Conclusion**
- ◆ **References**

The Science of Mind and Body

Our understanding of human health is changing rapidly. Acupuncture, yoga, meditation, feng-shui, and other mind-body healing practices are bringing 'energy' and the profound power of the mind to the forefront of our western consciousness.

Mind-Body healing practices remind us that, when given relief from environmental stresses such as difficult work situations, chaotic environments, and unhealthy relationships, in addition to the large amounts of manmade electronic pollution emitted from our electronic devices, the human body has a tremendous capacity to heal itself ... naturally. It is therefore our lesson to be learned that "we must work with nature rather than try to improve upon it."¹

You are about to learn what modern science is only now re-discovering ... that nature is energy. Our bodies are energy. Life, itself ... is energy.

What is Mind-Body Medicine?

"A key tenet of Mind-Body medicine is that health is not the mere absence of disease. Rather, it is the dynamic integration of our environment, body, mind and spirit."²

In recent years, studies have linked daily environmental stress to many health problems, from painful menstrual pains in women³ and heart attacks following stressful work situations⁴ to increased mortality in people recently laid off from work⁵, among many other findings. In 2004, researchers revealed for the first time that high levels of stress can actually damage DNA.⁶ In this study of 58 women, Dr. Elissa Epil of the University of California (SF) discovered that stress impacts women's health by increasing the rate of cellular aging, adding as much as 10 years to 'DNA age' compared to low stress women. Dr. Epil concluded that these findings can help us understand how "stress may promote earlier onset of age-related diseases."

It is not surprising then, that Mind-Body science research is pouring out studies showing the positive health benefits of such healing practices as meditation and yoga. Both Newsweek and Time magazine recently published special issues on the "New Science of Mind and Body" detailing research on how meditation can reduce arthritic pain, yoga can help counter the physical effects of chronic stress, and simple relaxation techniques can even help diabetics maintain healthy blood-sugar levels.^{7,8} In HIV research, a UCLA study found that simple optimism is associated with stronger immune function.⁷ The evidence is so overwhelming that major universities such as Harvard, Duke, and Arizona have created innovative medical programs dedicated to the exploration of Mind-Body healing sciences.⁹

'Energy' and Mind-Body Science

The body is electric. The heartbeat is an electrical impulse measured by EKG. Brain waves are electromagnetic brain signals recorded by EEG. In 1972, Yale anatomy professor, Dr. Harold Saxton Burr, published 40 years of research documenting the existence of electromagnetic energy fields around all living organisms which "reveal both physical and mental conditions [and] offer new insight into the state of both body and mind."¹⁰ Dr. Burr's work also showed that these energy fields come first, guiding the material of growing organisms into their proper place. Since his landmark publication, countless other researchers have documented and

published similar research detailing energy fields that surround all living organisms and the nature of their relationship to mental and physical well-being. Dr. Robert Becker, twice nominated for the Nobel Prize in Medicine, stated “all living things are surrounded by a magnetic field extending out into space from our bodies, and [these] fields from the brain reflect what is happening in the brain.”¹

In her book, *Infinite Mind*, UCLA professor Dr. Valerie Hunt recounts over 30 years of research and her startling first encounter with this human energy field while measuring electrical muscle activity in professional dancer, Emilie Conrad.¹¹ To her complete bewilderment, Dr. Hunt was unable to find any electrical activity in Emilie’s muscles shortly into her dance routine – there should have been substantial electrical activity during such physical exercise. Instead, the only energy Dr. Hunt could find was pouring out of the top of her head “with intensity beyond what our equipment could handle.” Emilie simply explained, “I create a field of energy and ride it.” Dr. Hunt immediately began her exploration of these energy field patterns, and years of subsequent research revealed that the mind plays a critical role in the creation and patterning of these electromagnetic energy fields, and that these fields in turn help shape the physical structure of our bodies, just as Dr. Burr discovered.

In fact, what researchers such as Dr. Burr, Dr. Becker, and Dr. Hunt, among many others^{12, 13}, are proving is that this energy field surrounding the body - what Dr. Hunt calls the “Mind Field” – may be the until-now missing link in the science of Mind and Body.

Many question, “How can the Mind possibly affect the Body?” But doctors forget that simply thinking sad thoughts can bring salty tears to bloodshot eyes. Researchers ignore what we have all experienced - that spending time with a depressed or negative person can leave us feeling down and even upset, as well; just as spending time with an upbeat, positive person can help us feel more healthy and energized. We can all appreciate that laughter truly is tremendous medicine. And art has proven for millennia with intense energy fields of sound (Mozart) and light (Van Gogh) that it can immediately - and forever - transform the human experience.

The evidence is literally all around us. We are electric beings, surrounded by an electromagnetic energy field that directly relates to our mental and physical well-being. Harvard is studying the science of Mind and Body, because, as Albert Einstein taught us with his most famous equation, $E = mc^2$ (Energy = Matter), energy and matter are in essence the same thing. How we work to create our own electromagnetic energy field affects the physical structure of our body.

Natural Electromagnetic Energy

When meditating or engaged in focused concentration, the brain creates strong electromagnetic signals of around 7 to 9 Hertz (Hz), also called Alpha waves.^{14, 15} When athletes are in “the Zone” – that place where athletic performance almost magically excels – certain patterns of increased Alpha waves typically precede, and even appear to enable, such moments of peak performance.¹⁶ In 2000, scientists at University of Chicago revealed that as professional golfers meditatively visualize a putt before taking it, their brains emit strong Alpha wave signals.¹⁷

Bio-medical engineer, Itzhak Bentov, described how a natural 7 Hz Alpha-like signal works rhythmically inside the body during meditation, connecting the skeleton and inner organs with the heart in a resonant dance that enables the heart to work less in “driving the body.”¹⁸ He

proposed that meditation, which creates this 7 Hz frequency both internally in the physical body and externally in the body's electromagnetic energy field, in turn radiates this signal out through the earth's electromagnetic field, interacting with others' electromagnetic fields and thus potentially helping them to achieve this resonant 7 Hz state, as well.

Interestingly, the Earth's natural electromagnetic field frequencies are measured daily to average around 7.8 Hz (called the Schumann Resonance) by scientists at UC-Berkeley's Seismology Laboratory.¹⁹ This natural average frequency at the earth's surface is similar to the 7 to 9 Hz Alpha frequencies emitted by the human brain in states of meditation, calm, and exceptional performance - the brain's relaxation signal is identical to the earth's natural frequency! Famous research by Dr. Rutger Wever in 1973 showed that a weak "earth signal" could dramatically restore biorhythm patterns to most biological measurements when a person is isolated from the earth's 7.8 Hz field.²⁰

The Dangers of Electromagnetic Pollution

Less than 75 years ago, when humankind used very little electricity and few radio frequencies, our bodies lived in harmony with the Earth's natural 7.8 Hz frequency. In just the last few decades, electricity and radio frequencies have increased tremendously such that we are now routinely exposed to levels of electromagnetic energy millions of times higher than ever before.²¹ In 2000, Nobel-prize nominee Dr. Robert Becker stated, "I have no doubt in my mind that at the present time the greatest polluting element in the earth's environment is the proliferation of electromagnetic fields [EMF]."²²

Dr. William Rae, a former surgeon, created the Environmental Health Center (Dallas) in 1974 after discovering that his puzzling allergic and neurological problems were due to EMF in the hospital's increasingly electronic operating room. His center has since helped thousands of people with sensitivities to EMF, many of whom did not realize the connection between their illnesses and EMF since they were often told by doctors that their symptoms were "all in their minds."¹

In addition to the growing number of people who may suffer from allergies to electromagnetic fields (which may include symptoms such as severe headaches, fatigue, glandular pain, hyperactivity, and more²³), in the last few decades evidence has mounted that manmade EMF may play a role in such diseases as Alzheimer's^{1,24}, Chronic Fatigue Syndrome²⁵, Cancer^{26,27}, and other illnesses. Additional recent evidence suggests manmade EMF may also be related to problems such as increased male infertility²⁸, miscarriage²⁹, headaches, sleeplessness, problems concentrating³⁰, and much more.

Governments, while often adopting the wait-and-see approach, have spoken out about the possible effects of EMF on humans. The US Environmental Protection Agency acknowledged in 1992 that recent research suggested magnetic fields may produce "significant effects."³¹ The World Health Organization's cancer research agency, IARC, stated in 2001 that they have "now concluded that ELF magnetic fields are possibly carcinogenic to humans..."³² In Europe, the conversation is more advanced than in the USA. In February, 2003, the European Commission and the WHO held a joint conference on the Precautionary Principle regarding EMF exposure.³³ In some countries, such as Portugal and Spain, concerned local governments have already begun to outlaw the installation of cell-phone relay towers on apartment building roofs and near

schools.³⁴ And in the Fall of 2003, CNN reported on a study conducted by three Dutch government ministries. This study, called “the first of its kind,” showed that radio signals for the next generation of mobile phone services can cause headaches and nausea.³⁵

Manmade EMF pollution is clearly one of the most serious environmental issues of today. What would happen if our bodies were able to function free of manmade electronic pollution and could live once again in the gentle, natural frequency environment of the earth?

The TESLAR Technology

Invented in 1986, the TESLAR technology was designed to emit a unique 7 to 9 Hz Alpha wave signal that interacts with and strengthens your body’s own electromagnetic energy field. Similar to the Earth’s natural 7.8 Hz signal and the Alpha wave signals emitted by the brain when you are calm, meditating, or doing yoga, or when athletes are in states of high performance, this TESLAR signal also helps reinforce your energy field against the possible negative effects of external, low-energy electromagnetic fields (EMF).

Much like listening to a clear radio broadcast free from static, the TESLAR signal helps your energy field filter out annoying and potentially harmful electromagnetic ‘static’ such that your body can stay closer to its peak performance, both physically and mentally.

In Honor of Nikola Tesla: A Pioneer of Energy Science

The TESLAR technology was named for Nikola Tesla, a Yugoslavian immigrant who worked with Thomas Edison. Tesla, a brilliant inventor, is the man who gave us alternating current. He is considered the father of scalar, non-Hertzian technology, the technology used in the TESLAR chip.

Scientific Research

Researchers began independent testing on the original TESLAR chip in 1988. In an independent pilot study done in 1989, Dr. Eldon Byrd, PhD, former U.S. Navy scientist for the investigation and research of the biological effects of ELF, observed a decrease in overall frequency amplitude and a shift toward lower frequencies in EEG recordings from individuals wearing the TESLAR watch. This pilot study demonstrated that the brain throws off 80% of the assaulting ELF with the help of the TESLAR.³⁶

Other studies have used Electro-dermal Screening (EDS). Electro-dermal screening was developed 35 years ago by Dr. Reinhold Voll, a German M.D., who combined the principles of acupuncture with modern technology. Each individual structure in the body has its own electromagnetic field. According to EDS, the strength of this electromagnetic field can be measured at identified acupuncture points, each point having a direct relationship to a specific organ. Using sensitive instruments, one can measure the electromagnetic potential at each point and thus draw a conclusion as to the electrical balance of the inner organs.

Using EDS in 1991, Dr. Anthony Scott-Morley, PhD, M.D. (alternative medicine), tested a variety of devices claiming to protect the subject from various environmental stresses. While testing an early version of the analog TESLAR watch, Dr. Scott-Morley showed the presence of the watch enabled the body to screen out or block ambient signals within our environment and those produced by generators and computer terminals. Testing the TESLAR on many of his patients, he recorded dramatic improvements in the energy level readings of most organs.³⁷ Wolde Korol, Diplomat of Acupuncture, replicated Dr. Scott-Morley's findings in 1992.³⁸

Dr. Glen Rein, PhD, while at Stanford Medical School, conducted in-vitro research using the TESLAR watch to isolate from possible psychosomatic effects in patients - the placebo effect. Dr. Rein's results showed that the presence of the TESLAR watch provided an environment in which there was, on average, 137% enhancement of human lymphocyte proliferation (immune function).³⁹ Another test demonstrated that nerve cells could inhibit their uptake of noradrenalin (a depression-fighting process) by as much as 19.5% in the presence of the TESLAR watch.⁴⁰

In June, 2002, the results of a pilot Heart-Rate Variability (HRV) study conducted by Dr. Michael Borkin, N.D., appeared in *Alternative Medicine Magazine* demonstrating the Philip Stein TESLAR watch's positive influence in the presence of a cell phone.⁴¹ HRV is the measurement of the beat-to-beat changes in heart rate, giving a dynamic glimpse into the autonomic nervous system's (ANS) state. This system controls the beating of the heart, the movement of the gastrointestinal tract and the secretion of hormones by the endocrine glands, among other vital functions. Thus, an HRV test is a good measurement of a body's overall response to stimuli.⁴² Dr. Borkin stated that his HRV study showed that the use of the Philip Stein TESLAR watch "may in fact compensate for some of the negative impact of using a cell phone."

In 2003, British Medical Doctor, Nyjon Eccles, Member of the Royal Council of Physicians, saw similar results on patients. Dr. Eccles' HRV testing confirmed that without the Philip Stein TESLAR watch, the autonomic nervous system becomes stressed when exposed to an energized mobile phone. While wearing the Philip Stein TESLAR watch in the presence of an energized cell phone, Dr. Eccles' results revealed a "stabilizing effect" on or even "beneficial stimulation" of parasympathetic regulatory system activity.⁴³

Dr. Valerie Hunt, professor emeritus of UCLA and founder of the BioEnergy Fields Foundation, has performed extensive research on the human body's electromagnetic field.¹¹ Dr. Hunt's experience with the TESLAR technology has led her to conclude that wearing the TESLAR watch "makes the [biofield] more dynamic and coherent, so that its transactions with the world are not just reactionary, but also selective."⁴⁴

Conclusion

We live in a world of high technology and sophisticated living. Our modern lifestyles encourage us to move and work faster in an attempt to accomplish more in less time than ever before. As a result of this stressful lifestyle and the pervasive electronic technology that powers it, our life-expectancy increases while our lifelong health declines. Fortunately, Mind-Body healing practices and scientific research are helping to transform our western consciousness, reminding

us that we are not simply *in* the Universe but also *of* the Universe¹⁰, and that this Universe – our planet Earth – is electric ... our bodies are electric.

The TESLAR technology, in actively creating positive, natural energy inside the body's electromagnetic energy field, is a profound advancement in Mind-Body science. Dr. Hunt's research led her to propose that health and sickness begin, continue and end first in the body's energy field, and that the best and most natural treatments are those which directly impact this energy field.¹¹ Dr. Hunt concluded:

“Life exists and is molded by its [energy] fields. ... Whatever conditions affect the human energy field will positively or negatively influence the body's healing capacity. ... Regeneration comes from re-energizing the field, and hence the body.”

References

1. Becker, R (1990). *Cross Currents: The Promise of Electromedicine, The Perils of Electropollution*. Tarcher/Putnam. NY.
2. The Deepak Chopra Center (2004). <http://chopracreatinghealth.com/intro.php>
3. Wang, L, et al. “Stress and dysmenorrhoea: a population based prospective study”. *Occup Env Med*, Dec 04; 61: 1021 - 1026.
4. Möller, J, et al. “Work related stressful life events and the risk of myocardial infarction ...”. *J Epidemiol Community Health*, Jan 2005;59:23-30.
5. Vahtera, J, et al. “Organisational downsizing, sickness absence, and mortality: 10-town prospective cohort study”. *British Medical Journal*, Mar 2004; 328: 555.
6. Epil, E, et al. “Accelerated telomere shortening in response to life stress”. *Proc. Nat'l Acad. Sciences USA*, Dec 7, 2004;101(49).
7. Newsweek Magazine (Issue: The New Science of Mind and Body). September 27, 2004.
8. Time Magazine (Issue: How Your Mind Can Heal Your Body). January 20, 2003.
9. Consortium of University CAM health centers, <http://www.imconsortium.org>. 2004.
10. Burr, H.S. (1972). *Blueprint For Immortality: The Electric Patterns of Life*. Neville Spearman Publishers. England.
11. Hunt, V. (1996). *Infinite Mind*. Malibu Publishing, California.
12. Oschman, J. (2003). *Energy Medicine in Therapeutics and Human Performance*. Elsevier. Edinburgh.
13. McTaggart, L. (2001). *The Field*. Harper Collins. London.
14. Kawano, H, et al. “EEG and topography during Chinese 'qigong' training”. *Neurosciences*, 1990; 16 (1) 503–508.
15. Kawano, K, Wang, F. “Differences between the EEG of Zen priests and internal qigong masters”. *J. Mind–Body Sci*, 1994;3(1)99–104.
16. Allman, WF. “The Mental Edge”, *Science & Society*, (In) *U.S. News & World Report*, 113(5), 50-56, August 3,1992.
17. “Scientists study golfers' brains to learn more about 'the zone’”. *CNN.com Health*. July 25, 2000. <http://archives.cnn.com/2000/HEALTH/07/25/golf.brain.ap/>
18. Bentov, I. (1977). *Stalking the Wild Pendulum: On the Mechanics of Consciousness*. Destiny Books. Vermont.
19. Northern California Earthquake Data Center, University of California at Berkeley. (2004). <http://quake.geo.berkeley.edu/ncedc/em.intro.html>
20. Wever, R. “Human circadian rhythms under the influence of weak electric fields and the different aspects of these studies”. *Int J Biometeorol*. 1973 Sep; 17(3):227-32.
21. Condeminas, M. “Nine Degrees of Health Risk From Electromagnetic Radiation in Mobile Telephones.” *European Comm. & World Health Organization Conf. on Application of the Precautionary Principle to EMF*. Luxembourg, Feb 2003.
22. Howe, L. (2000). “British Cell Phone Safety Alert: An Interview with Robert O. Becker, MD”. <http://www.energyfields.org/science/becker.html>.
23. “Allergies to Electromagnetic Fields” (1987). *Microwave News*, March/April Issue.
24. Maugh, T. "New Report links Alzheimer's and electromagnetic fields". *Los Angeles Times*, 7/31/94.
25. Maisch, D, et al. “Chronic Fatigue Syndrome - Is prolonged exposure to environmental level powerline frequency electromagnetic fields a co-factor to consider in treatment?” *JACNEM*, 1998 Dec;17(2):29-35
26. Matanoski, G, et al. “Leukemia In Telephone Linemen.” *American J Epidemiology*, 1993;137(6):609-619.
27. Wertheimer, N, and Leeper, E. “First report of relationship between exposure to 60-Hz magnetic fields from electric lines and childhood cancer.” *American J Epidemiology*, 1979;109: 273.
28. Fejes, I. “Relationship between regular cell phone use and human semen quality”. Presentation, Meeting of the European Society of Human Reproduction and Embryology (ESHRE) in Berlin 2004.
29. Goldhaber, M, et al. “The risk of miscarriage and birth defects among women who use visual display terminals during pregnancy.” *American J Indust Med*, 1988;13: 695-706.

30. "Police say new digital handsets are making them ill". Ananova (Orange mobile service). 18 July 2002. http://www.ananova.com/news/story/sm_631332.html?menu
31. United States Environmental Protection Agency Office of Radiation and Indoor Air. (1992) "Electric Magnetic Fields In Your Environment." Brochure. ISBN 0-16-036282-2.
32. World Health Organization - International Agency for Research on Cancer. "IARC Finds Limited Evidence that Residential Magnetic Fields Increase Risk of Childhood Leukemia." Press Release No. 136, June 27, 2001.
33. World Health Organization and National Institute for Environmental Health Science. (2003). "Conference on Application of the Precautionary Principle to Electromagnetic Fields". 24-26 February.
34. Priartem Association Nationale [France]. (2002). "La Lettre: Pour une Réglementation des Implantations d'Antennes Relais de Téléphonie Mobile."(5) April 2002.
35. Reuters News Agency. "Study: 3G Phones can make brain hurt." October 1, 2003. www.cnn.com.
36. Byrd, E. (1989). "Electroencephalography Testing on the ELF Shielding Device."
37. Scott-Morley, A. "The Teslar Wrist Watch." Health Consciousness, June 1991.
38. Korol, W. (1992). "Teslar Shielding Device, Screening Test." Written Report. Melbourne, Australia.
39. Rein, G. "Effects of Non-Hertzian Scalar Waves on the Immune System." Proceedings of the Psychotronics Association Journal, 1989.
40. Rein, G. "Biological Interactions with Scalar Energy – Cellular Mechanisms of Action." Proceedings of 77th International Association of Psychotronics, 1988.
41. Trivieri, L. "Protection You Can Wear." Alternative Medicine Magazine, June 2002.
42. Wastl, G. (2003). "The Nerve-Express & Heart Rate Variability." www.drwastl.org/files/nervexpress.html
43. Eccles, N. (2003). "Case Studies of the effect of the Teslar Watch on the Autonomic Nervous System as Measured by Heart Rate Variability." The Chiron Clinic, London.
44. Hunt, V. (2003). "The Teslar Watch." www.bioenergyfields.org.

Author: Bryan Reeves © 2005