Laboratory Testing Report

SafeSpace™

Cell Phone Patch

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THE ABILITY OF THE SafeSpace™ CELL PHONE PATCH TO NEUTRALIZE THE HARMFUL BIOLOGICAL EFFECTS OF ELECTROMAGNETIC FIELDS GENERATED FROM CELL PHONES

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Summary

EM fields from a cell phone was shown to have a statistically significant detrimental effect on DNA re-winding. In fact the cell phone energy was so toxic to the DNA, that it prevented the natural re-winding process, causing the DNA to further unwind. This detrimental effect of electromagnetic (EM) energy was completely neutralized when the SafeSpace™ was attached to the cell phone. In fact normal re-winding was enhanced when the DNA exposed to neutralized EM fields from the cell phone containing the SafeSpace™. The latter observation indicates that the energy from the SafeSpace™ has a beneficial biological effect on DNA by enhancing the natural re-winding process.

Introduction

Quantum fields have been described in quantum physics to explain the unusual behavior of matter at the subatomic level. It has recently been shown that quantum events also occur at macroscopic levels associated with atoms and molecules, in organic and inorganic systems. The unusual properties of macroscopic quantum fields, as compared with classical EM fields, are just beginning to be discovered. Two interesting properties, relevant for the **SafeSpace**™ technology, are their ability to be stored in an inert carrier and their highly coherent nature. Quantum fields and classical EM fields also share another relevant property, their ability to neutralize the biological effects of detrimental EM fields (Blackman, 1990). Although the exact mechanism of how one type of energy field can neutralize another is unknown, it is believed to involve coherence.

Quantum fields can now be generated from specially designed machines, as well as from the human body. Scientific studies on quantum fields generated from machines have been conducted in the fields of physics, non-linear optics and free energy. Relatively few studies, however, have examined the ability of inert carriers to store quantum fields in a form available for subsequent use. Nonetheless, the long-term storage of information has been scientifically established, despite the lack of understanding about the mechanisms involved.

The fact that water can act as such a carrier of quantum energy has been well documented in the field of homeopathy. This phenomenon, referred to as water memory, mostly studied in terms of

classical electromagnetic fields (Fesenko, 1995), but has also been studied by frontier scientists using quantum fields (Rein, 1992, Schwartz, 1991, Dibble & Tiller, 1999). Thus, water appears to store both chemical (homeopathic), EM and quantum information. In addition to water, geometric patterns (Rein, 1997), electronic circuits (Dibble & Tiller, 1999) and even paper (Omura, 1990) can store the subtle energies of quantum fields. These substances can therefore act as a continued source of quantum fields, even after the original energy which activated them has been removed.

The Quantum Biology Research Lab has been studying the biological effects of quantum fields since its conception in 1990. Of the different biological systems investigated it was discovered that the DNA molecule is a particularly effective antennae for quantum fields. Thus, in addition to classical EM fields (Semin, 1995), quantum fields resonates with the DNA molecule and causes a conformational change (winding and unwinding) of the two strands which make up the helix (secondary structure of DNA) (Rein, 1994a, 1995, 1996). This assay has been used to study EM emission from the body (Rein, 1994a, 1995, 1996), water memory (Rein, 1994b) and free energy devices (Rein, 1998).

Dimensional Designs has developed a process for storing different types of quantum fields in a variety of inert carriers. These experiments were designed to scientifically test the efficacy of the **SafeSpace**™ which has been imprinted with frequencies believed to neutralize the harmful biological effects of EM fields generated from cell phones.has been

The Experimental Approach

In these experiments the biological system being influenced by the EM fields from cell phones is purified human DNA suspended in water. The experimental methodology used in these experiments involves measuring the re-winding of the two DNA strands back into an intact double helix. Such conformational changes of DNA are classically measured by monitoring the absorption of UV light as a function of time (Thomas, 1954). The more unwound the DNA, the more exposed it is and the more it absorbs light.

Experimental Methods

Three types of experiments were conducted in this study. The control experiments were done first in the presence of ambient EM fields, but in the absence of any man-made EM fields. In the electromagnetic experiments, DNA re-winding was measured in the presence of EM fields from cell phones. The third set of experiments involved measuring DNA re-winding in the presence of neutralized EM fields from cell phones containing the **SafeSpace**™ product.

The specific protocol that was followed involved diluting denatured (unwound) human placental DNA (Sigma Chemical Co., St. Louis) in de-ionized water to a final concentration of 0.03mg/ml. The DNA was gently transferred to a quartz cuvette and then placed in the cuvette holder inside the spectrophotometer. For EM field exposure a mobile Nokia cell phone (plugged in and set on standby mode) was placed face up on top of the cuvette. To neutralize the EM fields, the SAFESPACE™ was placed on the back of the cell phone directly below the antennae with its central line running parallel to the main axis of the cell phone. A systematic examination of different locations and orientations was not done in this study, but could be considered for future studies. For both types of EM field treatments, the EM environment around the cuvette holder needed to be conditioned. This was accomplished by pre-conditioning the environment for 6 hours prior to adding the DNA to the cuvette holder.

For all experiments, the re-winding of DNA was measured over the course of one hour by a spectrophotometer which automatically measures the absorption of UV light at 260nm every 60

seconds. Absorption of light was measured using a UV-visible diode array spectrophotometer (Hewlett Packard 8451A). The rewinding curve contains two phases, an initial rapid phase followed by a slow phase. Data analysis was performed only on the second slow phase from 2220 seconds to 3120 seconds. The irregular lines in Figure 1 are composed of individual data points (absorption at 260nm) collected by the spectrophotometer. The solid black line is a software (IBM Excel) generated estimate of the best fit slope through these data points. From the black line, the software calculates a numerical value of the slope which is a measure of the rate of re-winding. The slope was calculated for each separate experiment and then compared statistically using a two sample t-test (assuming equal variance). For statistical analyses, see Table 1, a total of 10 control experiments, 6 EM experiments and 5 neutralized EM experiments were used.

Results and Discussion

A. Electromagnetic Fields from Cell Phones Effect DNA Re-winding

In order to measure an effect of these EM fields on DNA, the resonant conditions needed to be established. Under resonant conditions an information transfer will occur resulting in a physical change in the DNA molecule. It was expected that EM fields would slow down the natural re-winding process. Several trial experiments were conducted with this system until the resonant conditions were established. As expected the critical experimental conditions required to see an effect of cell phones on DNA included exposure time, intensity of the EM fields and the orientation of the DNA samples relative to the EM field.

In addition, it was discovered that an unexpected set of conditions was required to observe an effect of the cell phone energy on DNA. The specific conditions required for such coupling depended on the nature of the energies involved. In this case, EM fields from the motor in the spectrophotometer, the cell phone and the ambient environment all interact. Due to this complex mixture of energies, a 6 hour accumulation and equilibration time was required before the DNA sample was introduced into the pre-conditioned environment. Another recent study also observed an environmental conditioning effect (Dibble and Tiller,1999), although biological systems were not utilized.

The results in Figure 1 and Table 1 demonstrate the effect of electromagnetic (EM) fields from cell phones on DNA re-winding. Each graph in Figure 1 represents the re-winding curve from one typical experiment. In the absence of EM fields a negative slope for DNA re-winding was obtained (top of Figure 1). This is to be expected since the absorption of light decreases when the DNA rewinds over time. A more negative value for the slope reflects a steeper slope and a more rapid re-winding. In the absence of EM fields the average slope (re-winding) was -0.765 ± 0.05. In the presence of the cell phone energy, the slope becomes positive with an average value of $+0.806 \pm 0.08$. This indicates that the EM field from the cell phone is so toxic that it entirely prevents the DNA from naturally re-winding and causes it to unwind even more. The detrimental effect of EM fields from the cell phone is highly significant compared to the untreated control ($p<0.0001$).

B. Neutralization of the Cell Phone Radiation with the SafeSpace™

Although another energy, the quantum fields from the **SafeSpace**™ was introduced in these experiments, initial experiments indicated that the same 6 hour pre-conditioning of the

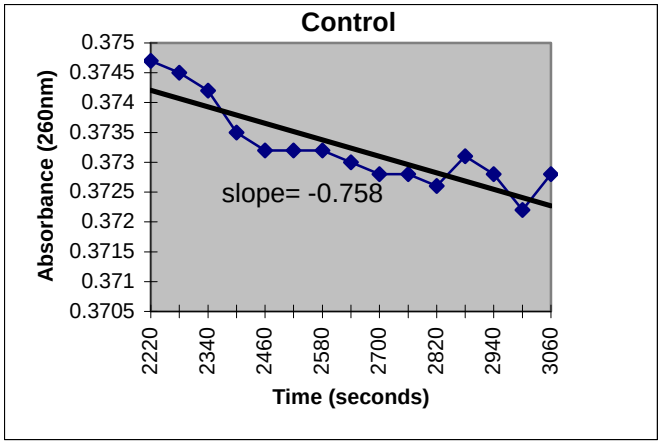
environment (that was used above) was adequate to equilibrate the different energies. Thus, using the exact same procedure previously described, it was demonstrated that the cell phone containing the **SafeSpace**™ produced a similar effect on DNA re-winding as was observed in the controls, ie. a negative slope. The average slope for these experiments was - 0.894 ± 0.10. This result is highly significant when compared with the effect of the untreated cell phone ($p < 0.0001$).

This result indicates that the harmful effect of the EM field from the cell phone is completely neutralized by the presence of the **SafeSpace**™. Of further interest is the comparison between the control and the treated cell phone. The result indicates that there is a statistically significant difference ($p=0.014$) between these conditions. These results demonstrate that the normal re-winding process is enhanced (steeper slope) when the DNA exposed to neutralized EM fields from the cell phone containing the **SafeSpace**™. This demonstrates that the energy from the **SafeSpace**™ has a beneficial biological effect on DNA.

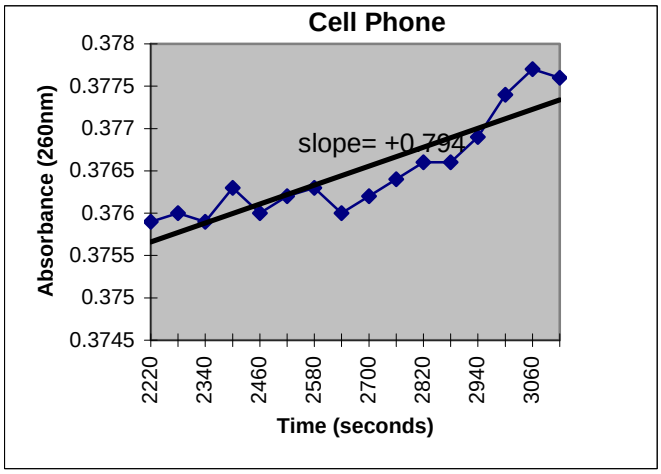
Table 1:
Effect of Normal and Neutralized EM Fields from Cell Phones on DNA Re-winding

	Average Slope	SD	n	p
Control	-0.785	0.05	10	
Cell Phone	+0.805	0.09	6	< 0.0001
Cell Phone+**SafeSpace**™	-0.894	0.10	5	< 0.0001

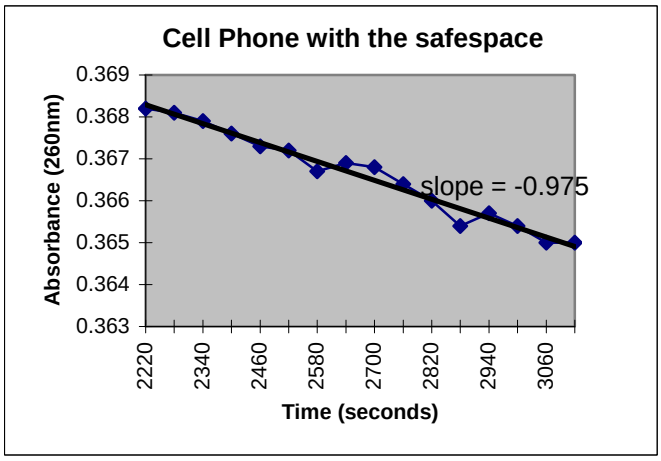
DNA TEST RESULTS



1. Slope indicating DNA struggle to recover from cell phone radiation



2. DNA recovery process seriously compromised from cell phone radiation



3. Cell phone with **SafeSpace**™ enhances natural DNA recovery process

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Addendum

Since cell phones are known to emit several types of EM fields with frequencies including the ELF, microwave and radiowave regions of the EM spectrum, the question arises as to which of these fields are blocked by the **SafeSpace**™ technology. A definitive answer cannot be made since the source of radiation in this study was an actual cell phone. However examination of the literature (Goodman, 1989; Lai, 1995,1996; Brusick, 1998; Krewski, 2001) indicates that all three types of EM fields generated from cell phones have direct effects on mammalian DNA. Although the particular activities of DNA measured in these studies are not the same as that measured in the present study, the results from the literature indicate that all three types of EM fields can resonate with DNA. Therefore, it can be concluded that either and all of these different EM fields emitted by cell phones are likely to be blocked by the **SafeSpace**™ technology.

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